JANUARY 28, 1955 20 CENTS

U.S. News & World Report

The United States News ® World Report ®

BUSINESS AHEAD —AS IKE SEES IT

NO NEED TO BOMB CITIES TO WIN WAR

A NEW COUNTER-FORCE STRATEGY FOR AIR WARFARE

VOLUME XXXVIII—No. 4 U.S. News & World Report WASHINGTON, D. C.

NEW WAR IN ASIA PUTS U.S. ON SPOT

Communists Close in on Formosa . . . Will the Navy Fight?

Island war is under way off Formosa, with Chinese Communists on the offensive. It's a war that can get hotter—and fast.

Testing period is over. Communists, running out feelers to see how much U. S. will take, got their answer by seizing one small Chiang Kai-shek base. Now, with U. S. on the side lines, the strategy is to knock off one Nationalist base after another, clear the invasion routes to Chiang's stronghold, Formosa.

Big war is not fixed in the cards. Communists are aware how far they can go. Any attempt to take Formosa will mean a fight with U. S.—and the Reds know it.

TAIPEI, Formosa

The Chinese Communists have just called another U. S. bluff and got away with it.

That is the story behind the successful amphibious assault by the Reds against tiny Yikiangshan Island, one of the Nationalist-held bases lying between Formosa and Communist-held Shanghai.

The U. S. has guaranteed the security of Formosa and the Pescadores, but U. S. leaders have refused to say whether this guarantee also covers the Nationalist-held offshore islands. Idea was that U. S. silence on this question would confuse the Communists and perhaps deter them from attacking the islands.

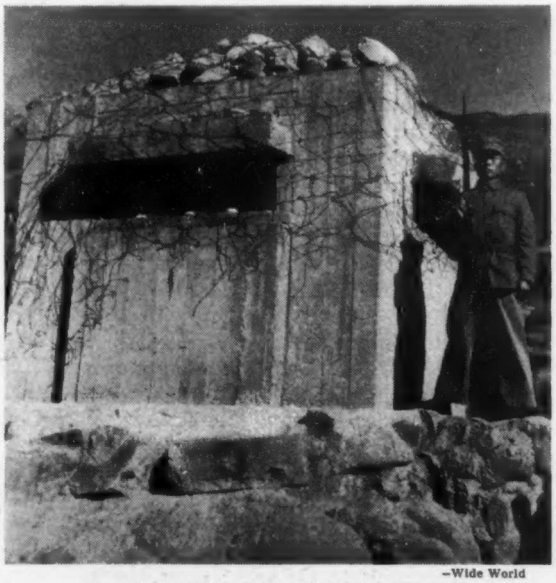
Communists ended this guessing game on U. S. intentions by attacking. The U. S. did not intervene in the shooting war. So the Communists now appear free to gobble as many Nationalist-held offshore islands as they can digest.

Chiang Kai-shek and his Nationalists are on their own in the offshore islands unless and until U. S. military planners change the picture by declaring that some islands are vital to the defense of Formosa.

More attacks expected. A chain reaction of attacks and invasions appears almost certain to result until the Nationalists are stripped down to areas guaranteed by the U. S.

U. S. forces will not deliberately join the shooting. The U. S. could be drawn in, however, if Communists attack U. S. ships during any evacuation of Chiang's forces from offshore islands.

Air attack on Formosa, if U. S. commanders here are correctly informed, will bring automatic U. S. intervention. What form this intervention will take still is a matter of conjecture. But much of the guess work about the future course of events in this shooting war now has been made clear.



—Wide World

NATIONALIST ON TACHEN ISLAND
. . . on his own?

On the Communist side this much becomes apparent:

First, the Communists are gaining invaluable experience in amphibious and combined air-ground operations. They may not be ready yet to challenge the U. S. by invading Formosa. But the Reds are getting the know-how they will need for bigger operations in the future against better-defended islands and possibly against Formosa itself.

Second, the Communists who talk peace apparently are not ready to settle for anything less than the acquisition of Formosa, whether by force or through diplomatic negotiation.

As a result, Formosa will continue to be Asia's hot spot, a source of possible war between Communist China and the U. S.

Third, further Communist successes in island grabbing may lower morale on Formosa and lower U. S. prestige in Asia to such a point that the Reds may decide to risk war to get Formosa itself.

Basis of Red strategy. Peiping's Communist Government is well

aware of the reduction of U. S. armed strength in the Western Pacific. Large naval, air and ground forces of the U. S. have been pulled out of the Far East since the end of the Korean war. The basic U. S. plan now is to build a mobile reserve at home.

Communists, paring away at Chiang Kai-shek's islands, may get the idea that the U. S. will go a long way to avoid a shooting war in the Far East, that the U. S. may have withdrawn so much of its strength from the area that even Formosa and the Pescadores may fall to the Communists sooner or later.

The test in which Communists now are engaged thus could cost Chiang Kai-shek all of his territory save that specifically guaranteed by the U. S.

The Communists began their testing carefully.

In mid-January they struck at the Tachen islands with a 200-plane bombing raid. The Nationalists maintain a garrison of 15,000 troops on those islands.

Nationalist planes, in retaliation, struck at the mainland bases of the Communists. This was their first attack on the Communist mainland since early in December. On U. S. advice, they had refrained from such attacks. U. S. military planners, apparently, hoped that the Communists would leave Chiang's islands alone if Chiang refrained from mainland attacks.

Next move by the Communists was the amphibious assault on Yikiangshan. This island itself was unimportant. It was defended by 2,000 Chinese Nationalist troops and was used only as a base for radar warning equipment.

Risk run by the Communists in this attack was small. In the event that U. S. air and sea power moved to assist the defenders of Yikiangshan, the Communists could have withdrawn their surface units quickly and called the attack merely a hit-and-run raid.

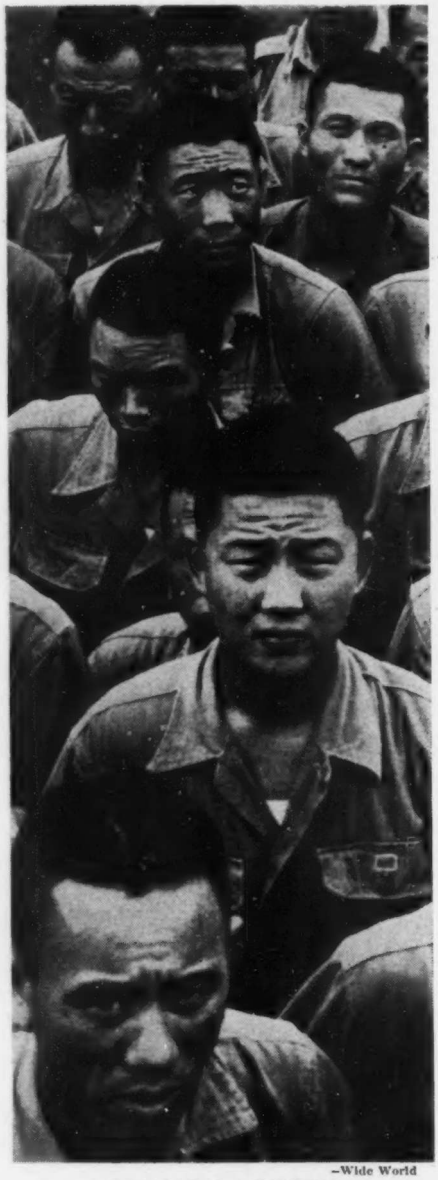
Tachens to fall? The Communists' success in calling the U. S. bluff, however, opens a new phase of the shooting war.

What comes next is an island war between Chinese Communists and Chinese Nationalists, with the U. S. standing by, but not intervening.

President Eisenhower himself, in Washington, has declared that the Tachens are of value as an outpost, but are not of value, in the American viewpoint, as a vital element in the defense of Formosa and the Pescadores.

This U. S. attitude, as military observers here see it, dooms the Tachens.

Chiang Kai-shek's strategy, at this stage, is to fall back to the offshore islands which are closer to Formosa than the Tachens. Chiang's commanders already have made extensive preparations to withdraw their northern outposts to **Nanchishan Island,** some 80 miles south of the Tachens.



—Wide World

CHIANG'S SOLDIERS
. . . 600,000 of them

Nationalist plans now are to abandon some of the offshore islands, but give up others only after a real fight. Some of these islands—such as Quemoy, opposite the mainland port of Amoy, and Matsu, near the mainland port of Foochow—are important to the defense of Formosa because the Communists cannot use their bases for invasion as long as the Nationalists hold the islands.

But Quemoy, Matsu and all the other offshore islands now are in danger of mass attacks by Communist forces from the mainland.

Jolt to Nationalists. Nationalist leaders, preparing to do what they can to fight off these Communist attacks, consider U. S. talk of a cease-fire and the U. S. failure to help hold the offshore islands as a serious letdown, a jolt to Nationalist morale, a boost for the Communists.

At one time the Nationalists listened eagerly to talk in the U. S. of "taking the wraps off Chiang," of "permitting" the Nationalists on Formosa to strike at the mainland of Red China with U. S. air, sea and logistical support. Now, many officers believe, the Nationalists will be lucky if they can hold to a few of their offshore islands.

Build-up of Chiang's military power in the Formosa area has been moving fast in recent months. U. S. economic and military spending is running at nearly half a billion dollars a year.

Over all, Chiang's forces are no match in size for Communist forces on the mainland. In the Formosa area alone, however, Chiang's U. S.-trained and U. S.-equipped forces have the arms, equipment and training to fight.

On the ground, Chiang has about 600,000 men in uniform. Only about half of these can be considered combat effectives. The combat troops are organized into 24 infantry divisions of about 11,000 men each and two armored divisions. Perhaps half of these are fully trained and equipped.

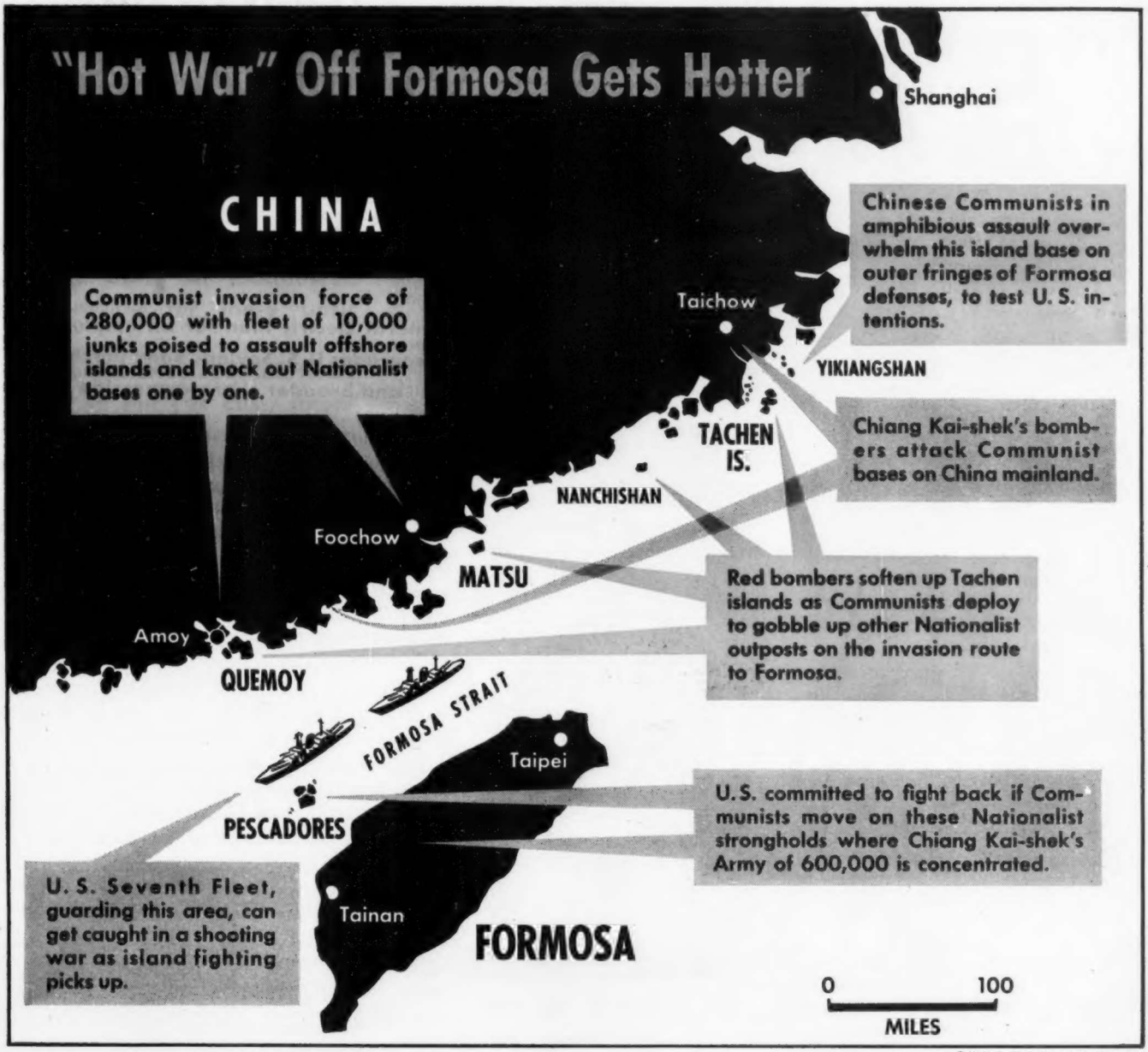
Across the Formosa Strait, the Communists have an Army of some 3.5 million men, many of them veterans of the Korean war. Their soldiers average five to six years younger than Chiang's Nationalist soldiers, who have done little fighting since 1949. On the mainland opposite Formosa the Communists have concentrated about 280,000 of their best troops, including some of their 150,000 trained paratroopers.

In the air, Chiang has only a force of 500 planes to meet the Chinese Communists' Air Force of 2,000 warplanes. But the Nationalists now have a group of F-86 Sabre jets to meet the Communist MIG jet fighters.

Assorted warships. The Nationalist Navy has an odd assortment of former American destroyers and destroyer escorts, obsolete ex-Japanese destroyers and corvettes, and new, U. S.-built high-speed patrol boats, rocket-firing landing ships and mine sweepers. Manpower, trained by the U. S. Navy, totals some 20,000 officers and 60,000 men.

Ship for ship, the Nationalists appear to have the edge over the Communists. Chinese Communists have only an overage British-built cruiser inherited from the Nationalists, a number of armed junks and many high-speed Russian-built torpedo boats and gunboats. They may also have one or two Russian-donated submarines.

War on the offshore islands, as it appears to be developing after the Com-



munist seizure of Yikiangshan, is likely to involve Communist troops on junks escorted by torpedo boats and gunboats. The Nationalists too, for counterattack, have a seasoned marine division of 13,000 men.

Chiang's fighting men today are far different from those he commanded after the debacle on the mainland in 1950.

For the first time in history, the Chinese Nationalist soldier has an adequate rice ration. He has hospitals and medical care, both unknown to him on the mainland. Officers no longer have the privileges they once enjoyed. Generals now can be seen riding bicycles.

On the plus side, as a result, the Nationalist fighting men have developed good teamwork, are in fine physical condition and show a willingness to fight that they rarely displayed on the mainland.

On the minus side, U. S. officers find a weakness in the chain of command at the top where Chiang tends to appoint officers for their personal loyalty to him rather than for their ability or loyalty to the Nationalist cause.

In addition, the Nationalist soldiers are growing older. Average age may exceed 30. Some 100,000 of the native Formosan population have been given basic training, but few are in the Regular Army. Nationalists know the Formosans tend to dislike all mainlanders.

Would Nationalists fight? The big, unanswered question is whether the Nationalist Army would or would not fight when the chips are down. Most American advisers on Formosa agree that the present Nationalist Army is far superior in firepower, training, equipment and stamina to the one that disintegrated on the mainland. But, as one officer said: "You never know what an army will do until it starts fighting."

Island by island the Communists now plan to whittle away Chiang's holdings of offshore islands. Many victories will be easy as long as the U. S. does not intervene with sea and air power.

Each island that falls to the Communists will be hailed by Peiping as another blow to Chiang's prestige and to the prestige of the U. S. in Asia. And each island lost to the Reds will bring the Chinese Communists closer to a real showdown with the U. S. over the island of Formosa itself.

LATEST PLAN TO DEFEND U.S.

More Planes, Carriers; Fewer Land Troops

New defense plans, proposed to Congress by the White House, do more than cut manpower. They provide for these basic shifts:

• Ground-force strength to be reduced in the Far East, maintained in Europe, increased in a mobile reserve at home.

• Sea strength to be shifted to Far East as prime force there.

• Air strength to be increased most in Europe and in U. S.

For 34 billion dollars a year, if Congress goes along, this country is to get armed forces that President Eisenhower considers adequate for its defense.

Before the Korean war, cost of armed forces was below 14 billion dollars a year, or less than half the projected rate of spending in future years. Before World War II, defense was costing well under 2 billion dollars.

How much defense can be bought for 34 billion dollars is shown in the chart on pages 26 and 27.

Congress has yet to agree that the military strength planned is adequate for defense of the United States and for fulfillment of its world-wide obligations. Controversy on this point is to grow in the months ahead. But the basic new plans are unlikely to be changed.

Under the plans, American forces around the world are to be shifted, some of them brought home, others moved to new stations, a few built up to increased strength and some demobilized.

Much of the nation's ground-force strength that has been stationed overseas to guard troubled areas is being brought back, some of it demobilized, the rest made into a mobile reserve that can be sent anywhere in an emergency.

Marines are to form a "ready" reserve. Instead of 2 divisions in the Far East and 1 in U. S., as in recent years, the planners now are to station 2 Marine Corps divisions at home, ready for emergency use, 1 regiment in Hawaii for use anywhere in the Pacific, and only 2 regiments in the Far East.

Army strength in the Far East is to be greatly reduced. Instead of 7 divisions in Korea, the strength about a year ago, only 2 divisions will be kept on guard there. Another 5 divisions and 5 separate regiments will remain in Europe. One division each has been assigned "permanent" duty in Alaska, Hawaii, Japan and Panama. The remaining 8 divisions will be kept in the United States, in training and as a mobile reserve. This compares with a total Army strength of 10 divisions before the Korean war.

Not all returned ground strength is to be retained, however. The Army is to lose about a quarter of its manpower, the Marine Corps an eighth of its men.

Sea power. Naval strength of U. S., as the planners see it, will shift somewhat to the Pacific. But a strong operating fleet will be kept in the Mediterranean, and a large number of ships assigned to the Atlantic. The "operating" fleet in the Far East is to be strengthened through transfer from the "administrative" First Fleet on the U. S. West Coast and in Hawaii.

The shifts envisage no cutback in the number of active warships. There will still be 405, plus one new carrier and a new atomic submarine each year, if the planners get their way.

Attack carriers will form the nucleus of each operating fleet. The plan assigns 4 of these carriers to the Far East,

B-47 BOMBERS ON THE PRODUCTION LINE
The goal for 1957 is 23,500 aircraft, nearly all jet propelled

HERE ARE THE ARMED FORCES

AN AIR FORCE OF THIS SIZE:

130 AIR WINGS, with 22,900 aircraft

These air wings to include:

50 big-bomber wings

33 home-defense wings

36 fighter-bomber wings

11 troop-carrier wings

All 119 combat wings to be jet-equipped

About 15 wings in the Far East, 16 in Europe

975,000 MEN IN UNIFORM

A MARINE CORPS OF THIS SIZE:

3 COMBAT DIVISIONS—2 in U. S., 1 in the Far East

3 AIR WINGS, one with each division

193,000 MEN IN UNIFORM

2 to the Mediterranean and 9 to reserve forces held in readiness along the East and West coasts of U. S. Assignment of about 1,000 other naval ships will tend to follow this pattern, too.

Ships will be operating with somewhat smaller crews, and there will be proportionately fewer cargo and support ships, as naval manpower is reduced by about 28,000 men and the number of noncombatant ships by about 100.

In the air. Air power under the new defense plan, meanwhile, is to expand substantially, with new units spotted on bases all around the non-Communist world.

Europe and nearby areas are to get the biggest build-up. Major bases are to be built and manned in Spain. Others are to be completed in the Near East and North Africa. More are planned in Western Europe.

But the planned build-up will affect air strength in other parts of the world as well—bases in being or under construction in Greenland, Alaska, the Philippines, Okinawa, Japan, Saudi Arabia and elsewhere.

Rotated to these overseas bases regularly, or maintained at expanded bases within continental U. S., will be an increasing number of air-combat units, with an increasing number of jet aircraft and men to operate them. The plan is to step up air strength from 119 air wings at present to 130 wings by mid-1956, then to the goal of 137 wings by June, 1957.

When that goal is reached, within 30 months under the White House plan, the Air Force is to have in operation around the world about 23,500 aircraft,

THAT IKE PROPOSES FOR MID-1956—

AN ARMY OF THIS SIZE:

19 COMBAT DIVISIONS—5 in Europe, 2 in Korea, 1 in Japan, 1 in Hawaii, 1 in Panama, 1 in Alaska, 8 in U. S.

12 SEPARATE REGIMENTS and REGIMENTAL COMBAT TEAMS—1 on Okinawa, 1 in Japan, 1 in Berlin, 1 in Austria, 3 others in Europe, 5 in U. S.

1,027,000 MEN IN UNIFORM

A NAVY OF THIS SIZE:

1,000 NAVAL SHIPS of all kinds

405 warships in operation

15 attack carriers—4 in the Far East, 2 in Mediterranean, 9 based on East and West coasts of U. S.

13,000 naval and Marine aircraft

Fleets in the Atlantic, Pacific, Far East and Mediterranean

664,000 MEN IN UNIFORM

nearly all jet propelled. They will be organized into 54 wings of big "strategic" bombers, 34 wings of "continental defense" jet interceptors, 38 wings of "tactical" jet fighters and fighter-bombers, 11 wings of big troop-carrier transports.

The long-term plan, in other words, provides for withdrawing some ground-combat strength from overseas to form a small mobile reserve at home, shifting naval strength from the Atlantic to the Pacific, and building up air strength around the world. A major cut in ground-force strength, a small cut in sea strength, and a 30-month increase in air strength are included.

The decision on the changes is attributed entirely to President Eisenhower. He wrote to Defense Secretary Charles E. Wilson on January 5, explaining that he had proposed the basic plan to the Joint Chiefs of Staff.

Whether this blueprint is to be accepted without a struggle by the services themselves is not yet certain. Army officials are known to be questioning the premise of the defense plan: that war against Russia will be short, sharp, and fought largely with air power and with nuclear weapons, and that small, mobile forces are adequate for "police actions." But a top-level decision now appears to be made, the pattern set for altering U. S. defenses as the H-bomb era gets under way.

A military writer's proposal for a still greater change in military outlook starts on page 78. And a report on military spending, with the rest of the federal budget, begins on page 98.

Interview

with COL. BERNT BALCHEN

Assistant for Arctic Activities, U.S. Air Force

ARCTIC FLYING IN THE NEXT WAR

EDITOR'S NOTE: *Big things are happening in the Arctic. U. S. is conducting a major military maneuver there, involving thousands of paratroopers and airmen. Russians are said to be holding large-scale military exercises. There are reports of plans for transforming ice islands into bomber bases, for setting up vast new radar nets, new defense outposts.*

To get the real story of what's going on in that part of the world—what is feasible and what is not—"U. S. News & World Report" interviewed the outstanding military expert on the Arctic, Col. Bernt Balchen. The interview follows.

COL. BERNT BALCHEN, *born in Norway 55 years ago, has become the U. S. Air Force's top specialist in Arctic activities. His experience shows why:*

Back in the 1920s, he was a member of the Amundsen-Ellsworth-Nobile Arctic Expedition, and chief pilot of the Byrd Expedition to the Antarctic. Later, he was chief pilot of the Ellsworth Antarctic Expedition, an official of Norwegian Airlines, the U. S. Army officer who built and commanded Bluie West 8 Air Base on Greenland, and commander of a rescue squadron in postwar Alaska. He now serves in the Pentagon.

Q Do you think the Arctic will really be important if there's another war, Colonel Balchen?

A Due to the third power we have today—air power—the Arctic is in the center of the civilized world, and, consequently, a lot of operation missions would have to go through this area.

Q Will this importance be solely as an airway, or as a site for radar screens?

A It will have a double function: To have an area through which operation missions will go, and it is very important for the North American continent to utilize the land areas that we have there to establish early-warning radar screens across these areas.

Q Is there ever likely to be such a thing as a ground war in the Far North?

A There could be. Because a part of the border against Russia in the Scandinavian peninsula is a part of the NATO [North Atlantic Treaty Organization] defense area, and the Scandinavian peninsula on the northern flank of the European front forms a very important part in the defense of the NATO countries.

Q There have been ground wars in the Far North before, have there not?

A Oh, yes, all the way up through history. There've been wars fought by the Finns and Russians, the Swedes and the Russians, and we have a lot of wars that could be termed Arctic wars on the Russian front.

Q Would you say that the Russians are ahead of this country or behind in the military development of the Arctic regions?

A Well, that's a question you need a really good crystal ball to answer, and mine is not good enough to answer that. But there are certain things that we can draw conclusions from, and one is the following: that the whole of the Soviet Union is in a cold climate. Therefore, their operations have to be conducted in cold weather during a large part of the year. Moreover, their population is accustomed to the cold-weather climate and, consequently, they have an advantage there. So far as their technical development in cold-weather equipment is concerned, that is a question that we just can guess at.

Q British newspapers say that the Soviet Union has just concluded tests that show that ice islands can serve successfully as bomber bases. Would you say that this is a fair conclusion?

A No. I think that's an overrating of the simplicity of supporting a bomber base in the Arctic, or anyplace in the world. Because you can land on a snow-compacted runway during the cold season out on any of these islands, on any surface that you compact; but to get the supplies out there which you need to call it an operational base—that is a question of an entirely different magnitude.

Q Why is it difficult to maintain Arctic bases?

A The main differences between an Arctic base and a base in a Temperate Zone are the logistic difficulties imposed as a result of climate. The climatic difference is this: the short season in which it is accessible by methods of navigation that can bring in the heavy supplies—except by air, which is prohibitive when you are talking about the tonnages for a modern base—and, in addition, the climatic effects on equipment and personnel.

Q Who is in the more advantageous position in the matter of Arctic bases—the United States and Canada, or the U.S.S.R.?

A That is a question that is rather difficult to answer in a few sentences. I would say that we are in a more advantageous position on account of some of the warm currents going up high into the Arctic on our side, making bases available in high latitudes, open to navigation for longer parts of the season, than over on the Russian-Siberian side.

Q Do the Russians have the same logistic requirements for their bases as we do?

Polar Region in Air Age Is "Center of Civilized World" . . . Uses: Route for Missions, Site for Warning Radar

A Well, to operate an aircraft they need fuel and lots of other things, ammunition and bombs. As a military operation, yes, it should be about the same. But we know that the Russian soldier requires much less to live on, and that their comfort requirements, which I've seen from personal experiences with the Russian armed forces, are much lower. The soldiers are required to live on much less and to have less heat and less comfort. Consequently, their logistic requirement is lower than ours.

Q The British say that experiments indicate that any air war involving action across the North Pole area would most probably occur in the summer because of fog and other problems in the other seasons. Is that a fair conclusion?

A I don't see what the fog has to do with an air war, because an air war today is fought generally up in a high atmosphere, up in the ionosphere and the stratosphere, I could nearly say. Actually, the fog in the Arctic Basin in the summertime is prevalent—that's correct—and it hampers ground operations. But operations across the Arctic Ocean wouldn't be hindered. I would believe that the season, therefore, for aerial operations across the Arctic wouldn't be any hindrance except if they were started from Arctic bases. The summertime would be the least favorable. The winter and early spring would be far more favorable, in my opinion, when the weather is clear.

COL. BERNT BALCHEN

Q We have a number of bases in that area. What are some of the most important ones?

A Generally speaking, we have the North American continent to the west defended from the Alaskan complex, and in the east, in Labrador, Baffin Island and Greenland, we have the northeast complex. The bases there, I think we can say, form the local defensive areas of the North American continent.

Q How close do we have our bases to Moscow and to the Russian industrial complex?

A Well, that's something anybody can mark off on a globe. The air-line distance from one of our bases is in the neighborhood of 2,700 miles, nautical miles.

Q How close to Washington and our industrial complexes are the Russian bases?

A In the neighborhood of 3,000 and more miles.

Q It's not much of an advantage either way as far as distance is concerned, is it?

A No. It's just about "even Stephen" as far as distances are concerned. But that's not an over-all thing in determining the availability of targets.

Q What about the area about the North Pole itself—is this an area of huge ice islands?

A No. I wouldn't call it ice islands, because the ice island

(Continued on next page)

—Department of Defense

FLETCHER ISLAND: "It might be advantageous to man it again"

. . . "Small stations on pack ice" can aid polar air operations

that you have been reading about is a specific phenomenon, a part of an ice cap, shelf ice which had broken off apparently on the north coast of Ellesmere Island and had been drifting around among the polar pack ice. The polar pack ice is ice that has frozen in the Polar Ocean, which is an area of about 5 million square miles, and is drifting around there all the year round.

The Polar Ocean is never completely cemented with the ice in rest. It is always in movement. We have a movement off the North American continent, which we call the Beaufort Sea eddy, which is between the North Pole and the North American continent, and moving in a clockwise direction—in other words, going in a westerly direction along the Canadian archipelago, Alaska, and between Alaska and Siberia, turning upwards toward the North Pole. On the other side, we have a counterclockwise movement that joins with a current going out between the east coast of Greenland and Spitsbergen into the Greenland and Norwegian seas, which is the spillway of this tremendous ocean, where the polar ice is draining out and giving us cold water to mix with the Gulf Stream, which causes a lot of trouble along the Newfoundland banks and Greenland in bad weather.

Q What effect does this movement of the ice islands have on any defense plans that we may have?

A The ice islands I don't think have any importance in defense planning. But the capability of being able to set out small stations for specific purposes out on the polar pack ice, on the solid old polar floes out there, may have quite significant importance in support of your polar operational plans across the Arctic Ocean.

Q What was the Fletcher Project that the United States Air Force was engaged in for a while?

A It was the establishment of a weather station and a hydrographic station for scientific purposes out on one of the ice islands, on one of the large pieces that had broken off and was floating around out there. It was discontinued because Fletcher Island drifted too close to one of the Arctic weather stations, and therefore the benefit derived from there was not enough to warrant the expenditure. But, as soon as Fletcher Island gets further away from established stations, it might be advantageous to man it again.

—United Press

LIFE IN THE ARCTIC: ". . . the darkness and the cold in the wintertime"

. . . Arctic "open for aggression" in '46, now "gap is closing"

Q Did the United States learn all it wanted to know from the expedition utilizing this ice island?

A Oh, no. We never learn enough about the Arctic. As long as we don't habitate in the Arctic, live in the Arctic, there will always be a lot to learn. The men we are sending there for the armed services on a very short tour just find out a little of what it is about.

Q How is the big base at Thule, Greenland, working out?

A In my opinion, very satisfactory.

Q Could you describe the life at Thule, some of the problems that you have there?

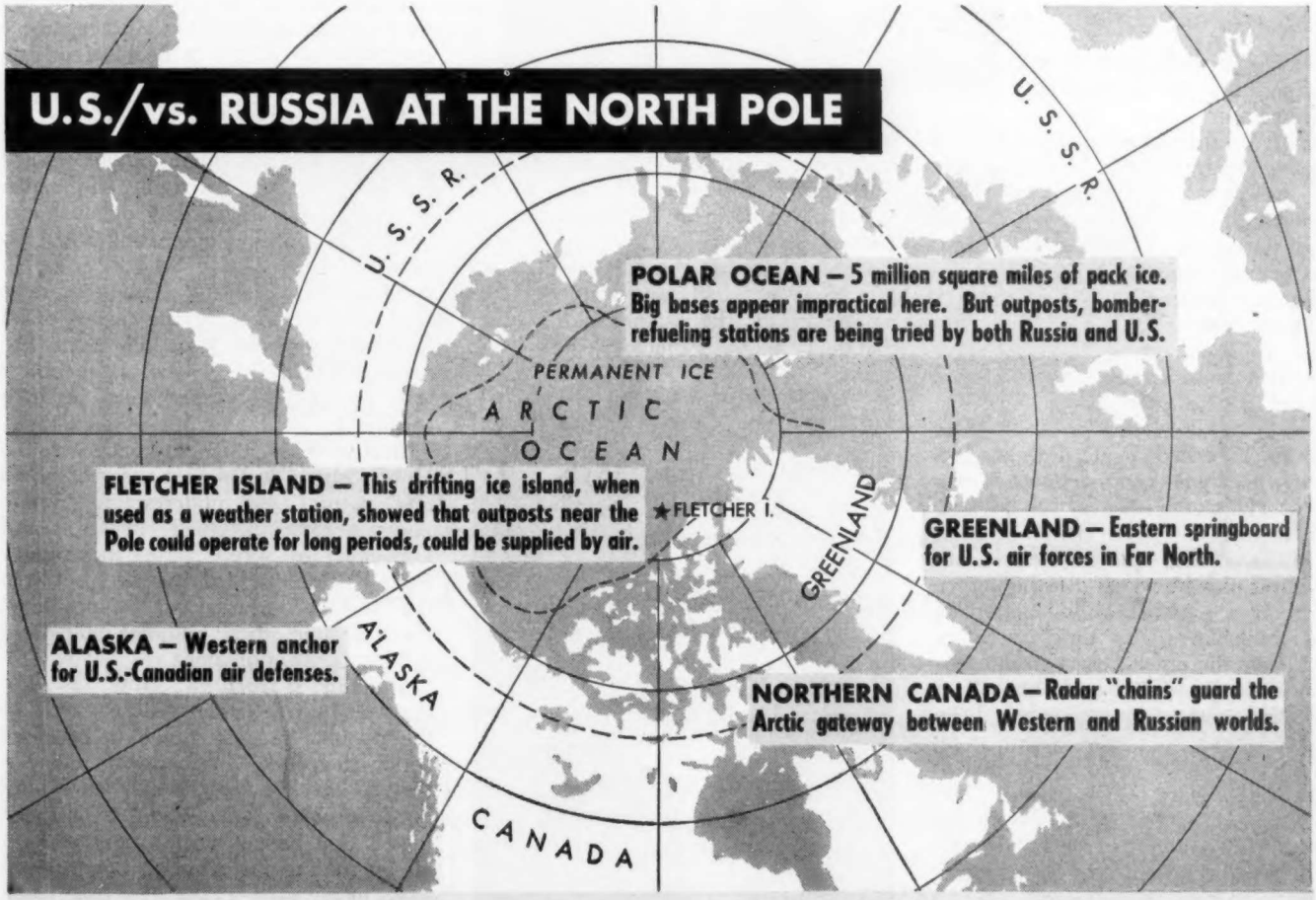
A The problem for the American airman going into the Arctic is mainly isolation from towns, from his relatives, and so on. Climatologically, it is the darkness and the cold in the wintertime, and it is the midnight sun and the absence of extreme heat in the summertime. But isolation, I think, is the main problem there. As far as the base itself is concerned, living on a military base, they have all the comforts that the services are able to give them on a base. So, their life there doesn't differ very much if you exclude family life and female company, which they haven't at the present time.

Q How long is the tour for our men in Thule?

A One year, and I think that's too short. Because a man then just learns what a cycle in the Arctic looks like. He doesn't become an Arctic soldier in that time.

Q What steps are the United States and Canada taking to defend our northern frontier?

A Well, I think the steps they have taken there have been very positive. When you consider that in 1946 when General [Carl] Spaatz, Commanding General of our Air Forces in Europe during World War II and later Chief of the Air Force, made a statement that we are all open across the Arctic for any aggression, and the same was for the Soviet as well—that gap is closing and has been closed to a considerable degree through the effort and expenditures of our armed forces, by our Air Force with their high Arctic installations, and the co-operation and aid from the Canadians, too. Tremendously important work has been done in that connection, but a lot remains to be done, too.



BIG STRATEGY FACTORS—Russians are more used to cold and hardship than U.S. soldiers and fliers. U.S. air bases in Far North are better located, more easily supported than Russian bases. U.S. has an air base 2,700 miles from Moscow. Russia's nearest bases are about 3,000 miles from Washington.

BUSINESS AHEAD —AS IKE SEES IT

In the future, as Mr. Eisenhower forecasts:

Business is going to be mostly on its own.

Government will try to keep the climate favorable for private enterprise, will look to businessmen to spark prosperity.

Recovery, now started, will carry through 1955, set a base for long-term growth.

Business, at the present time, is able to keep expanding without depending on any "upward thrust" from the Government.

These views of the President and his Council of Economic Advisers are given in what follows. A letter by Mr. Eisenhower is presented in full.

MR. EISENHOWER EXPECTS MORE GOOD TIMES

Following is the full text of the letter of transmittal that President Eisenhower sent to Congress with his Economic Report on Jan. 20, 1955:

TO THE CONGRESS OF THE UNITED STATES:

I am herewith presenting my Economic Report, as required by Section 3 (a) of the Employment Act of 1946.

In preparing this Report, I have had the assistance and advice of the Council of Economic Advisers. I have also had the advice of the heads of the executive departments and independent agencies.

I present below, largely in the words of the Report itself, what I regard as its highlights.

Sources of Economic Progress

With production and employment now increasing on a broad front, the events of the past year have borne out the major conclusions of the Economic Report of January 1954 concerning the state of our economy and the policies needed to promote sound economic growth.

Economic well-being sustains our whole national life. A high and rising standard of living brings to more of our people the opportunity for continued intellectual and spiritual growth.

The main sources of our Nation's economic strength are its free institutions and the qualities of its people—their ambition, skill, enterprise, and willingness to make great efforts in their own behalf and in behalf of their families and communities.

The need of our times is for economic policies that, in the first place, recognize the proven sources of sustained economic growth and betterment, and in the second place, respect the need of people for a sense of security as well as opportunity in our complex, industrialized society.

A free economy has great capacity to generate jobs and incomes if a feeling of confidence in the economic future is widely shared by investors, workers, businessmen, farmers, and consumers.

Many factors favor a continuation of our vigorous economic growth. The population is increasing rapidly, educational levels are rising, work skills are improving, incomes are widely distributed, consumers are eager to better their living standards, businessmen are starting new enterprises and expanding old ones, the tools of industry are multiplying and improving, research and technology are opening up new opportunities, and our public policies generally encourage enterprise and innovation.

With wise management of the national household, our country can within a decade increase its production from the current annual level of about 360 billion dollars to 500 billion, or more, expressed in dollars of the same buying power.

In the future as in the past, increases in productivity and in useful employment opportunities will be the core of economic expansion.

The role of the Federal Government in the achievement of these goals is to create an atmosphere favorable to economic activity by encouraging private initiative, curbing monopolistic tendencies, avoiding encroachment on the private sector of the economy, and carrying out as much of its own work as is practicable through private enterprise. It should take its full part at the side of State and local governments in providing appropriate public facilities. It should restrain tendencies toward recession or inflation. It should widen opportunities for less fortunate citizens, and help individuals to cope with the hazards of unemployment, illness, old age, and blighted neighborhoods.

Last year the Government took many steps, both legislative and administrative, to encourage economic expansion. Fiscal and monetary measures fostered an expectation of improving economic conditions and encouraged people to maintain a high rate of expenditure. The opportunities of competitive enterprise were enlarged; economic ties with other countries were improved; the floor of personal and family security was strengthened; and additions were made to our public assets.

The Economy Today

The year 1954 was one of transition from contraction to recovery. The contraction reflected the efforts of businessmen to reduce inventories, and was aggravated by a large reduction in military expenditures.

The contraction was relatively mild and brief, because of a variety of timely public and private actions.

The Government cut taxes, the Federal Reserve System eased credit conditions, and the Treasury arranged its financing so as not to compete with mortgages and other long-term issues. A comprehensive program for encouraging private enterprise was submitted to the Congress. Apart from this, the decline in private incomes was automatically cushioned by increased payments of unemployment insurance and other benefits and by sharp cuts in taxes due the Government on the reduced incomes.

Consumers maintained a high rate of spending, businessmen kept capital expenditures at a high rate, builders stepped up their activities, trade unions conducted their affairs with a sense of responsibility, farmers recognized the dangers of piling up ever larger surpluses, private lenders made ample supplies of credit available on liberal terms, States and localities carried out large construction programs, and export demand remained strong.

Although manufacturing production fluctuated, total output was fairly stable, and disposable personal income reached record levels. But some industries and localities suffered from serious unemployment. The fortunes of most of them turned for the better when recovery got under way in the early autumn, and they will benefit from further general economic expansion.

Instead of expanding Federal enterprises or initiating new spending programs, the basic policy of the Government in dealing with the contraction was to take actions that created confidence in the future and stimulated business firms, consumers, and States and localities to increase their expenditures.

The vigor of the recent recovery, which has already made up half of the preceding decline in industrial production, suggests that economic expansion will probably continue during coming months. It holds out the promise that we shall achieve a high and satisfactory level of employment and production within the current year.

A further expansion of consumer spending may reasonably be expected; we are soon likely to experience some rebuilding of inventories; the decline of Federal spending next year will be less rapid than during the last two years; State and local expenditure will probably continue to expand; the outlook for housing and commercial construction continues to be good; there is a prospect that plant and equipment expenditures may turn upward, as the general economic advance proceeds; the outlook for export demand is brightened by the economic resurgence of an ever-widening area of the Free World.

It is essential to keep a close watch on financial developments; continued economic recovery must not be jeopardized by overemphasis of speculative activity.

Toward Sustained Economic Growth

The wise course for Government in 1955 is to direct its program principally toward fostering long-term economic growth rather than toward imparting an immediate upward thrust to economic activity.

Further efforts to reduce Federal expenditures, together with increasing revenues from a tax base growing as the economy expands, should make possible some additional general tax reductions next year. Progress could then also be made in further lowering tax barriers to the free flow of funds into risk-taking and job-creating investments.

Government should persist in its efforts to maintain easy entry into trade and industry, to check monopoly, and to preserve a competitive environment. Continued encouragement should be given to small and new businesses.

Scientific research and development activities in all their phases should continue to have the earnest support of the Federal Government.

Measures by ourselves and other nations to reduce existing barriers to international trade, payments, and investment will make the Free World stronger and aid our own economic growth.

Measures should be considered to extend personal security against the hazard of unemployment, to strengthen minimum wage legislation, to protect savings in credit unions, and to increase the President's discretionary authority to vary the terms of insured mortgage loans in the interest of economic stability.

A great ten-year program to modernize the interstate highway system should be authorized.

Our partnership policies of water resource development should be further implemented by appropriate Congressional and local action.

Action should be taken this year to help meet our Nationwide needs for school construction. I shall shortly send to the Congress a special message that will deal with methods by which the Federal Government can appropriately assist in this vital field.

Support should be provided for an Office of Coordinator of Public Works Planning in the Executive Office of the President, and for a revolving fund for advances to the States and municipalities for public works planning.

Conclusion

Our Nation's recent history teaches that a foresighted Government can do much to help keep the economy stable, but experience affords no good basis for a belief that the Government can entirely prevent fluctuations.

We should harness the idealism as well as the intelligence of our generation to the practical end of facilitating the growth of private enterprise and of increasing the stability of our economy.

The Government will shoulder its full responsibility to help realize that goal.

DWIGHT D. EISENHOWER

HOW PRESIDENT'S COUNCIL ESTIMATES PROSPECTS

Following are excerpts from the Report of President Eisenhower and the Council of Economic Advisers that was sent to Congress on Jan. 20, 1955:

Basic Economic Tenets

The economic actions of this Administration and its program for the future rest upon certain basic propositions.

First, competitive markets, rather than governmental directives, are as a rule the most efficient instruments for organizing production and consumption.

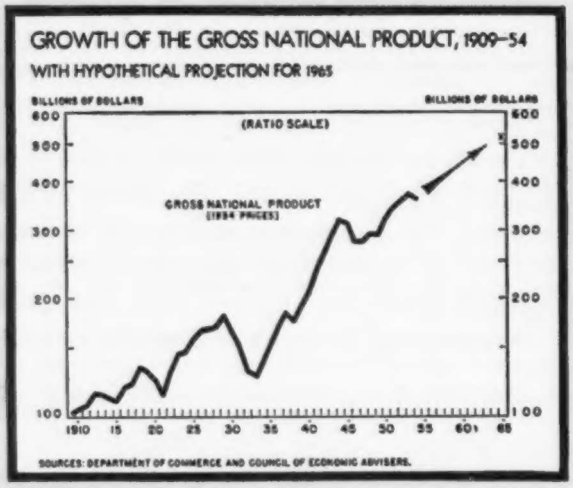
Second, a free economy has great capacity to generate jobs and incomes if a feeling of confidence in the economic future is widely shared by investors, workers, businessmen, farmers, and consumers.

Third, the Federal Government creates an atmosphere favorable to economic activity when it encourages private initiative, curbs monopolistic tendencies, whether of business or labor, avoids encroachment on the private sector of the economy, and carries out as much of its own work as is practicable through private enterprise.

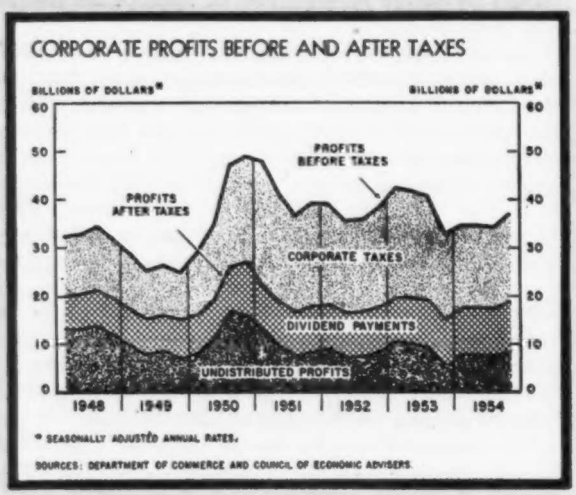
Fourth, the Federal Government generates confidence when it restrains tendencies toward recession or inflation,

HOW EISENHOWER

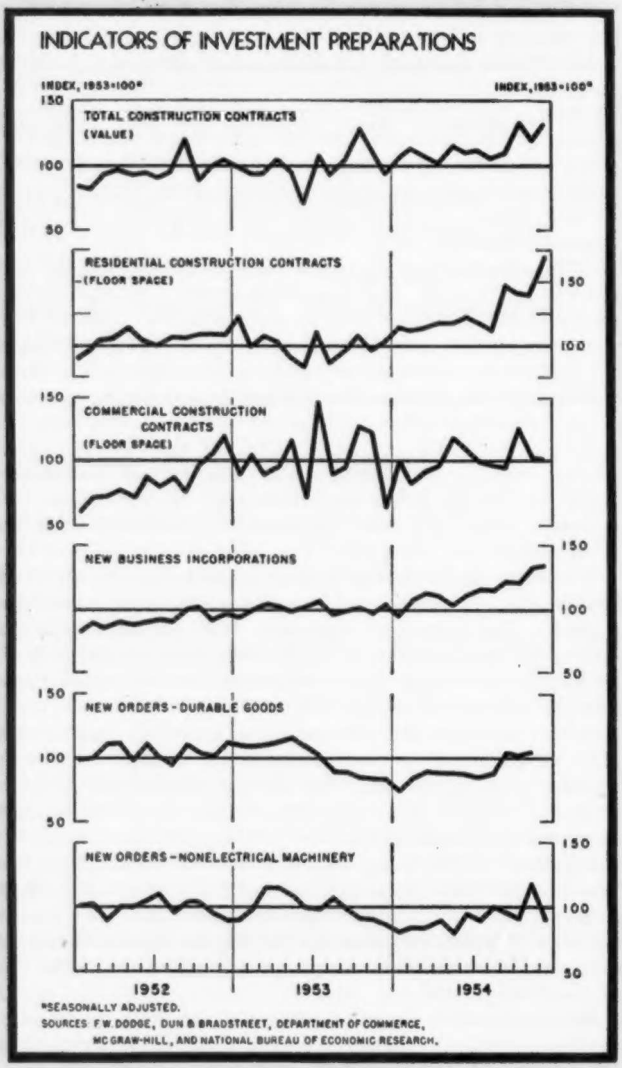
1. Total output is headed up



2. Business profits are climbing



3. Investment plans show strength



and does this by relying largely on indirect means of influencing private behavior rather than by direct controls over people, industries, and markets.

Fifth, the Federal Government contributes to economic growth when it takes its part, at the side of the States, in promoting scientific research and in providing public facilities, such as highways, hospitals, harbors, and educational institutions, on which the expansion of the private economy heavily rests.

Sixth, the Federal Government strengthens the foundations of the economy when it widens opportunity for its less fortunate citizens and, working in cooperation with the States and localities, helps individuals to cope with the hazards of unemployment, illness, old age, and blighted neighborhoods.

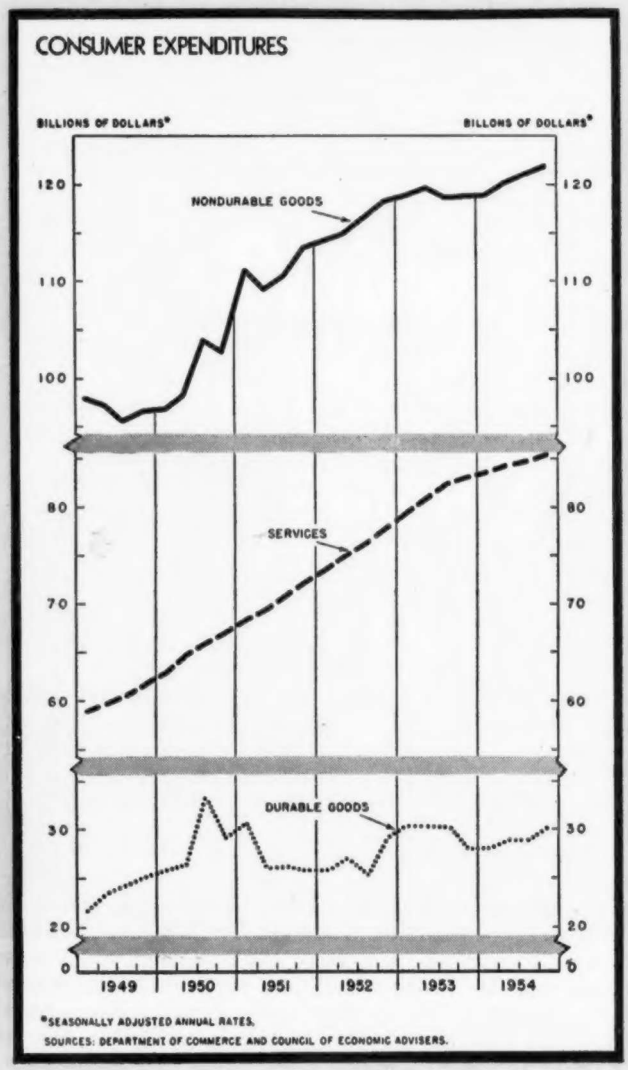
These economic tenets are basic and inseparable. They constitute guides to policies which, if pursued persistently, will advance us toward the goal of an increasing national income, shared equitably among those who contribute to its growth, and realized in dollars of stable buying power. In broadest outline they constitute the framework of an economic system that is at once strong and humane, a system that can provide both greater material abundance and a better quality of living.

The Growth Potentials of Our Economy

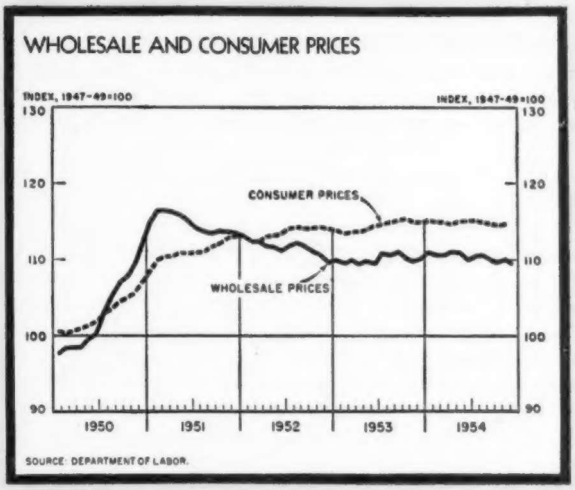
The American economy has created new jobs and produced marvels of abundance in the past. It should be able to do so in equal or even greater degree in the future. Our population is rapidly increasing, educational levels are rising, work skills are improving, incomes are widely distributed, consumers are eager to improve their living standards, busi-

CHARTS THE FUTURE

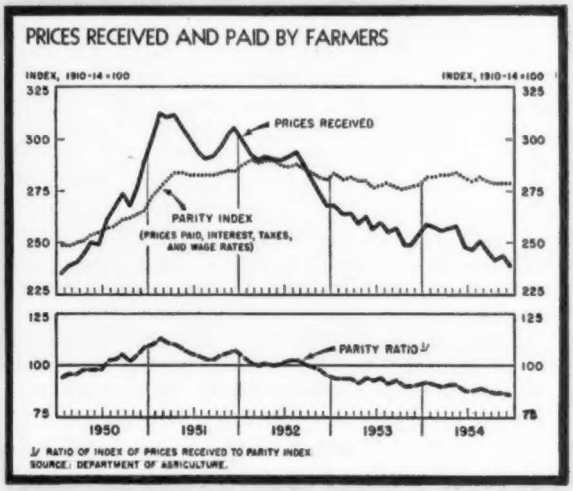
4. People are buying freely



5. Prices generally are steady



6. But farm prices still drop



nessmen are actively engaged in starting new enterprises and expanding old ones, the tools of industry are multiplying and improving, research and technology are constantly opening up new opportunities, and our public policies generally encourage enterprise and innovation. With so many favorable factors, a continuation of rapid economic growth may reasonably be expected.

An arithmetical calculation, based on a number of technical assumptions, the most important being that the average annual gains in productivity that we have had in recent times will occur in the future, shows that our country can within a decade increase its production from a current annual level of about 360 billion dollars to 500 billion or more, with the figures expressed in dollars of the same buying power. Of course, the record of the past sets no limit to our future achievements. Nor should we permit arithmetical projections to obscure the basic fact that an economy succeeds only as people succeed. Our economic future depends on the full use of the great treasure house of intelligence, skill, energy, and confidence of the American people.

A glorious economic future may be ours, but it is not vouchsafed to us. We shall achieve it only by wise management of our national household. In the future as in the past, increases in productivity and in useful employment opportunities will be the core of economic expansion. The tools and equipment used by farm, factory, mine and office workers must be multiplied and improved. Industrial techniques, materials, and management must become more efficient, and skills and morale enhanced, so that the amount of production for each hour worked will increase. And unless there are satisfactory jobs for those who seek useful employment, and unless human labor is devoted increasingly to the production

of goods and services that improve the quality of life, our gains in productivity may be dissipated.

Role of Government in Progress

The history of our country, as well as of other parts of the Western World, demonstrates that economic progress depends fundamentally on the enterprise and initiative of millions of people seeking to better themselves. In such a process of economic expansion the Government can play, however, a highly constructive role. Within its own proper sphere, the Government must be ready and willing to act. Indeed, failure or reluctance to play its part can be a serious handicap to economic growth, as would a similar lack of initiative on the part of private enterprise.

Among the activities essential to economic progress and in which there is a large public interest is the field of education, extending from education for literacy to the highest reaches of theoretical inquiry. Scientific and technical knowledge, research and development programs, and industrial innovation and its diffusion are the wellsprings of an increasing output per man-hour, upon which our hopes for a better life and more leisure in the future largely depend.

An enlightened public policy must therefore focus attention upon augmenting the number of young people who have scientific, engineering, and technical skills; upon encouraging creative thinking and invention; upon inducing business enterprises and nonprofit organizations to support expanding programs of research; upon enlarging the range and depth of Federal research and development programs in fields that cannot be covered adequately by private efforts; and upon hastening the industrial application of new methods and ideas through new investments.

Public policy must also protect incentives and encourage a spirit of enterprise and innovation among people. The man or woman who, in the hope of personal betterment, works harder, designs a new product, creates a new method, invests in a new business, moves to a new job, or suggests a new idea to his employer must believe that the rewards of initiative and effort are worth while. Through all of its policies the Government must encourage enterprising action by business managers, investors, and workers, in an environment that is kept basically free and competitive.

Economic progress entails changes in technology and commerce, and these changes require adjustments by people to new and altered ways of doing things. To insure that a dynamic economic environment involves a minimum of personal hardship and a maximum of new opportunity, governmental policies should be designed to ease the movement of people to new areas or new occupations. Through an ever wider possession of education, technical skill, and capacity for movement, new doors of economic opportunity can be opened and the remaining pockets of low income in our land can be reduced.

Expansion of private economic activity calls for great increases in the Nation's physical stock of public capital, as the Economic Report to the Congress in January 1954 pointed out. Government—State and local as well as Federal—has a responsibility to see that progress is promoted by adequate public works for education, medical care, transportation, conservation, and recreation.

The achievement of our economic goals requires that we further strengthen the floor of security for individuals and families in our industrialized society. When people have provided for minimum needs in their old age or in the event of misfortune, they are apt to become more productive and more venturesome participants in an expanding economy. A wise Government can help people to provide for these needs, without impairing their self-reliance.

A strategy for realizing our Nation's growth potential must include, as an indispensable part, measures by ourselves and others for gradually clearing the channels of trade, of payments, and of investments between nations, so that our people as well as others may devote themselves to the tasks in which they have a special advantage, and so that the Free World may be bound together by a mutually beneficial economic intercourse. Thus our Nation's security, as well as its material welfare, may be advanced.

Finally, we must continue to coordinate all governmental programs, especially monetary and fiscal policies, in order to restrain and offset any tendencies that may develop toward recession or inflation. An expanding economy requires increases in the supply of money and credit, but not on a scale that invites inflation in the present and possible depression in the future. The Federal Government should continue to manage its revenues, debts, and expenditures, and conduct its regulatory activities, so as to contribute to the expansive strength and stability of the economy.

• • •

Why the Contraction Proved Mild

The course of the recent contraction raises important questions for all students of public affairs, namely: Why did the economic setback of 1953-54 prove so mild on an over-all basis? Why did our total national output of goods and services decline no more than 4 per cent? Why did not the decline turn into the cumulative, spiraling depression that many feared and some expected? Why, to put a still more exacting question, did the gross national product decline from an annual rate of about 370 billion dollars in the second quarter of 1953 to 356 billion in the third quarter of 1954, or by 14 billion dollars in all, when the primary contracting factors—inventory spending and Federal spending—declined between them as much as 24 billion dollars?

These are difficult questions and they will doubtless engage the attention of scientific investigators for a long time to come. Nevertheless, some of the factors that contributed to the result are clear even today. Consumers not only maintained their spending at a consistently high level, but reduced their rate of saving during 1954.

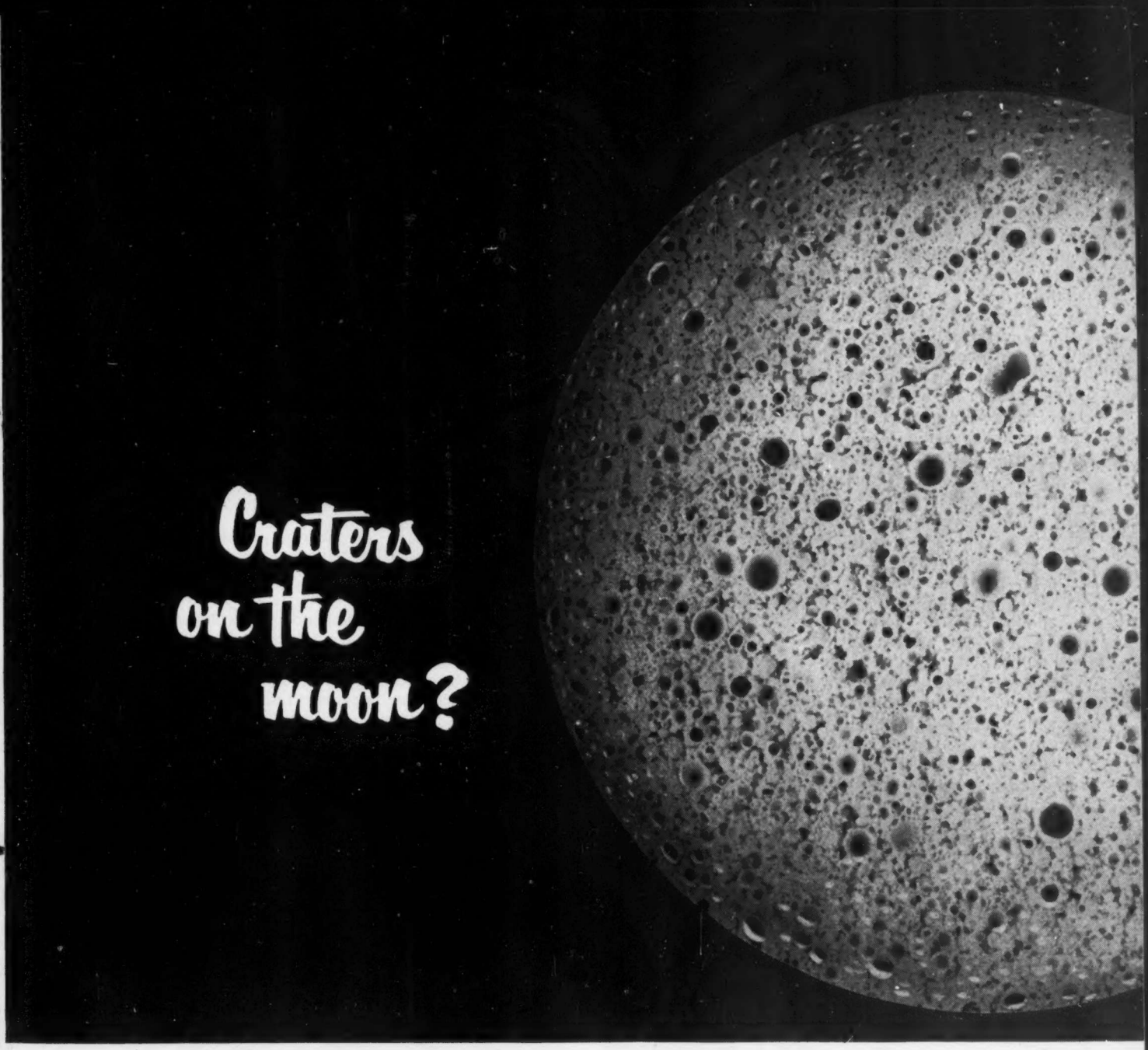
Businessmen kept up their capital expenditures at a high rate, increased the flow of dividends to stockholders, and intensified their selling efforts. Builders and real estate developers stepped up their operations. Trade unions conducted their affairs with an eye to basic conditions and with a sense of responsibility. Farmers and their organizations recognized the danger of piling up ever larger surpluses. Commercial banks and other financial institutions made ample supplies of credit available on liberal terms. States and localities carried out large and expanding programs of school, hospital, and road construction. And the continuing recovery of Western Europe helped to augment our exports and to bolster the prices of internationally traded raw materials.

Clearly, many people had a part in stemming the economic decline and easing the readjustment from war to peace. The Federal Government also contributed significantly to the process of recovery. It influenced the economy in two principal ways, first, through the automatic workings of the fiscal system, second, by deliberately pursuing monetary, tax, and expenditure policies that inspired widespread confidence on the part of people and thus helped them to act in ways that were economically constructive.

Role of Federal Government

It is well to recall that we have developed in our country a fiscal system that tends to cushion or offset a decline in private income. When employment and income decline, tax receipts decrease and certain expenditures, such as unem-

(Continued on page 48)



No, they're bubbles made of ALCOA Alumina by The Carborundum Company

Illustrated above is a cross-sectional view of something new in lightweight refractory material, a castable high-temperature cement made from ALCOA Alumina by The Carborundum Company, Perth Amboy, New Jersey. It's one of the world's best insulators in the upper temperature ranges of furnace operations. Mixed with water, the castable containing these pure alumina bubbles can be poured, begins to harden almost immediately thereafter.

Because ALCOA Alumina is so highly refractory, these cements withstand from 2800° to 3100°F depending on the type used. And, because ALCOA Alumina is one of the most stable and inert materials in existence, these cements show little or no shrinkage even at extreme heats . . . are inherently resistant to furnace atmospheres and combustion gases. Further, because of dead air space in the thousands of tiny alumina bubbles, you get an excellent insulator, one that lets a furnace heat up fast.

Carborundum finds that alumina bubbles can be used almost anywhere you need a top-quality refractory with the convenience of a castable. Back-up linings for nonferrous melting furnaces . . . burner blocks for core ovens . . . boiler furnaces . . . malleable annealing furnaces . . . side-wall back-ups. These bonded alumina bubbles are also offered as prefired brick and in special shapes.

If you are looking for *better* refractory performance at higher operating temperatures, look for refractories containing ALCOA Alumina. You'll find they last longer, require fewer tear-downs, are actually most economical.

ALCOA does not make refractories, but we will gladly discuss with you the properties and characteristics of the various ALCOA Aluminas. Write to ALUMINUM COMPANY OF AMERICA, CHEMICALS DIVISION, 701-A Alcoa Building, Pittsburgh 19, Pennsylvania.

ALCOA CHEMICALS

ALUMINUM COMPANY OF AMERICA

ployment insurance payments, automatically increase. These offsets cannot be counted on to prevent a depression, but they can be of very material assistance, as recent experience indicates.

Between July 1953 and July 1954 total personal income derived from production decreased at an annual rate of 4.4 billion dollars. In the meantime, unemployment insurance and other social security payments to the public increased at the rate of 2.2 billion dollars, while tax payments by the public—quite apart from the change in rates that became effective in January 1954—fell at the rate of another billion. These two factors alone served, in very large part, to offset the over-all decline of personal income from production, and their effects were augmented by the operations of the farm price-support system.

The experience of corporations was similar to that of individuals. While corporate income decreased at an annual rate of 7.4 billion dollars between the second quarter of 1953 and the second quarter of 1954, the tax liability of corporations was cut by 4.5 billion dollars merely as a result of a decline in income and quite apart from any change in the tax law. Once again, therefore, our taxing machinery automatically cushioned the impact of a declining income on the sums available to corporations for paying dividends or adding to their assets.

The Government was not content, however, to play merely a passive role in the economy. On the contrary, definite and deliberate steps were taken to promote a stable prosperity. One of the earliest acts of the new Administration, after taking office in January 1953, was to remove price and wage controls, in order to restore the functions of competitive markets. With a boom psychology existing at the time and unemployment at a vanishing point, this reform carried the danger of inducing fresh inflation. A precautionary policy of restricting credit expansion was therefore adopted. The aim was to prevent a reckless increase of investment and a deterioration in the quality of new credits, such as had often characterized the closing stages of economic booms in our history.

By May of 1953 it became clear that a policy of credit restraint had already accomplished this purpose, and that its further continuance might incite an anxious scramble for cash. The Federal Reserve authorities therefore proceeded promptly to ease credit conditions, first, by expanding the reserves of commercial banks, second, by reducing the reserves that the banks were required to hold against their deposits. In line with these actions, the Treasury arranged its financing so as not to compete with mortgages and other long-term issues. These steps were initiated before the peak of business activity had been definitely passed.

Later, in September 1953, when it was not yet generally appreciated that an economic decline had already begun and that the curtailment of defense spending might carry it further, the Secretary of the Treasury announced that the Administration, besides relinquishing the excess-profits tax, would not seek to postpone the reduction of the personal income tax, scheduled for January 1, 1954. The cuts served to reduce taxes during the next six months by 1.1 billion dollars, and it has been estimated that they will reduce taxes from July 1954 to June 1955 by 4.7 billion dollars. Although the tax reductions were partly offset by increases in social security contributions that also became effective in January 1954, the net effect was to increase substantially the money available to people for spending or investing.

The basic policy of the Government in dealing with the contraction was to stimulate business firms, consumers, and States and localities to increase their expenditures, rather than to expand existing Federal enterprises or initiate new spending programs. The success of this policy is evident in the present recovery. It is evident also in some of the unusual, and at first blush puzzling, characteristics of the recent contraction—the steady increase of disposable personal income, the almost uninterrupted rise of consumer spending, the expansion of State and local improvements, the maintenance of private investment in fixed capital close to peak levels, the expansion of the money supply, and the steadiness of the price level.

Tax reductions, along with unemployment insurance benefits and other social security payments, supported powerfully the income at the disposal of individuals and families. This can be seen from a simple calculation for the interval from July 1953 to July 1954. If we combine the effects, first, of the automatic reduction of tax payments resulting from reduced incomes, second, of the deliberate changes of tax rates that occurred in January 1954, third, of the expanded flow of unemployment insurance and related payments, we get a sum of offsets to a declining production income that comes to 5.2 billion dollars.

Since the income derived from production declined by an annual rate of only 4.4 billion dollars, the income available to the public for spending or saving actually increased by nearly 1 billion dollars. This remarkable result—namely, a rise in disposable personal income accompanying a 10 per cent decline of industrial production—has no parallel in our recorded economic history. Tax reductions not only offset reductions from production income; they also helped to make production income itself larger than it would otherwise have been. As noted previously, corporate profits before taxes fell at an annual rate of 7.4 billion dollars between the second quarter of 1953 and the second quarter of 1954.

Meanwhile, the reduction of taxes that automatically accompanied the decline of income, coupled with the removal of the excess-profits tax, reduced the tax liability of corporations at an annual rate of 5.5 billion dollars, and thus offset the greater part of the reduction of corporate income.

Had it not been for this reduction of taxes, it is unlikely that corporations would have increased their dividend payments at an annual rate of 300 million dollars during this period, thus bolstering the flow of personal income. Nor is it likely that they would have maintained their capital expenditures at so high a rate, thereby supporting the Nation's income base. And if this is true of corporations, it is not less true of individuals and families. With their disposable income increasing, people spent money rather freely and thus supported employment and the flow of income to themselves, their neighbors, and others.

The effects of monetary and debt management policies on the community's income stream are harder to trace than the effects of lower taxes, but there can be no doubt of their significance or pervasiveness. These policies were adjusted swiftly to changing conditions, and helped materially, first to prevent inflation, later to check contraction.

Before the recession of economic activity in 1953 had commenced, interest rates were already declining. Later in the year, the easing of credit terms became general, and extended from prime issues to those involving larger risks. Financial institutions, amply supplied with reserves or cash, sought opportunities to put their resources to use.

With the demand for business and consumer loans relatively low, they eagerly took up mortgages, municipal bonds, corporate issues, and Treasury obligations. As a result, the loans and investments of commercial banks increased by about 10 billion dollars during 1954 and the money supply increased further—especially in the second half of the year.

Had it not been for the increased availability of credit and the easing of terms, the fast pace of residential, commercial,

(Continued on page 50)

WHEN David's dad was David's age, his family used electricity mostly for lighting, in fixtures like this...

Suppose you collected all your appliances for a photograph like this one. How would they compare with this Sellersville, Pa., family's? Here are the Hoageys of 340 Church St.—son David and his parents, Mr. and Mrs. Lloyd A. Hoagey. (A daughter, 18, is attending Pennsylvania State University.) Check your time and work saving appliances with the number the Hoageys have.

Today David's family uses electricity mostly for appliances—52 of them—and enjoys far more and better lighting. Today they use seven times as much electricity. But they pay just a little more than twice as much for it.

When David has his own home he will have many more new electric appliances. He'll be using twice as much electricity as his dad is using today. And he will have all the electricity he needs—because America's electric light and power companies are building ahead so there will always be plenty. That's one reason why there's no need to increase the public debt by building more unnecessary federal government power projects.

AMERICA'S ELECTRIC LIGHT AND POWER COMPANIES*

**Names of the Electric Light and Power Companies publishing this advertisement available from this magazine's advertising department.*

"YOU ARE THERE"—CBS television—witness history's great events

and State and local construction, which did so much to stabilize the economy during the past year, would not have been attained. Nor would consumers have been able so easily to arrange financing for a part of their expenditure. Nor would the liquidation of inventories have proceeded with so little disturbance to markets or general economic activity.

It is well to recognize, however, that the reasons for the success of recent policies are not to be found in them alone. Tax reductions, however attractive they may seem when the economy is declining, will not necessarily lead to an increase of spending or investing. Easier credit conditions, larger bank reserves, even a larger money supply will not necessarily put new money to work in industry. Management of the public debt so as to avoid competition with mortgages and other capital issues will not necessarily increase private capital formation.

• • •

Lessons From Experience and Guides to the Future

In the course of our latest encounter with the business cycle we have learned or relearned several lessons.

First, that wise and early action by Government can stave off serious difficulties later.

Second, that contraction may be stopped in its tracks even when governmental expenditures and budget deficits are declining, provided effective means are taken for building confidence.

Third, that monetary policy can be a powerful instrument of economic recovery, so long as the confidence of consumers and businessmen in the future remains high.

Fourth, that automatic stabilizers, such as unemployment insurance and a tax system that is elastic with respect to the national income, can be of material aid in moderating cyclical fluctuations.

Fifth, that a minor contraction in this country need not produce a severe depression abroad.

Sixth, that an expanding world economy can facilitate our own readjustments.

These teachings of experience should serve us well in the years ahead, though we must always be alert to the special needs of every new situation.

As our minds turn from the past to the future, the basic fact to keep before us is that, while the groundwork for the recent recovery was laid by the Government, the recovery itself was brought about by the American people. A mood of confidence about the economic future has been gradually developing in recent years, and the strength exhibited by our economy last year has reinforced this trend.

A large and increasing number of business managements have become accustomed to thinking in ambitious, long-range terms. Expecting our economy to grow and prosper, they do not permit minor variations in sales to divert them from the objective of strengthening, or at least maintaining, their competitive position five or ten years later. Hence they boldly allot large sums to research, plan capital expenditures well beyond immediate needs, launch extensive investment projects, and even judge one another by these yardsticks no less than by profit-and-loss statements.

The economic horizons of consumers are also widening. One of the marvels of our generation has been the growth of consumer capital—modern homes, automobiles, radios, television sets, washing machines, air conditioning units, electric dryers, food freezers, and so on in an ever longer list. Perhaps at no time in the past has the desire for material improvement played so large a role in the economy as it does today. Consumers continue to visit bargain basements but their preferences run strongly toward the latest contrivances, newest conveniences, and premium grades. And if people are no longer timid about borrowing to expand their current spending, they are also willing to work hard to acquire the incomes needed to live as they feel they should.

Output of some rapidly growing consumer commodities and services

Commodity	*Unit*	*1940*	*1948*	*1953*	*1954**
Air-conditioning units, room	Thousands	†	73	1,045	1,230
Antibiotics	Thous. lbs.	2	243	1,630	1,780
Blankets, electric	Thousands	†	675	948	1,050
Dryers, clothes	Thousands	58	92	737	890
Freezers, farm and home	Thousands	†	690	1,090	975
Frozen foods	Million lbs.	431	1,163	3,500	3,800
Furnaces, warm air, oil and gas	Thousands	123	379	925	1,110
Oil burners, residential	Thousands	264	420	852	800
Oleomargarine	Million lbs.	320	908	1,292	1,320
Shavers, electric	Thousands	900	1,650	3,500	3,950
Synthetic detergents	Million lbs.	30	550	2,134	2,350
Synthetic fibers, other than rayon	Million lbs.	5	75	301	320
Television sets	Thousands	†	980	7,215	7,400
Waste food disposals	Thousands	†	175	325	360
Water heaters, electric and gas	Thousands	676	2,540	3,002	3,075
Service					
Cleaning and dyeing	Index, 1940=100	100	302	369	367
Repairs, household durables	Index, 1940=100	100	326	912	1,170
Revenue passenger miles flown	Billions	1	6	16	17

*Preliminary. †Production was relatively small.

Source: Department of Commerce, based on data from various private and Government sources.

With the business cycle apparently under reasonable control, with the size of population growing rapidly, with science and technology adding new wonders each day, with incomes distributed widely, with mass markets expanding to match mass production, and with governmental policy steering a middle course between the political extremes, both material and psychological factors are peculiarly favorable to economic progress. Hence, the business recovery now under way is powerfully supported by underlying forces of economic growth.

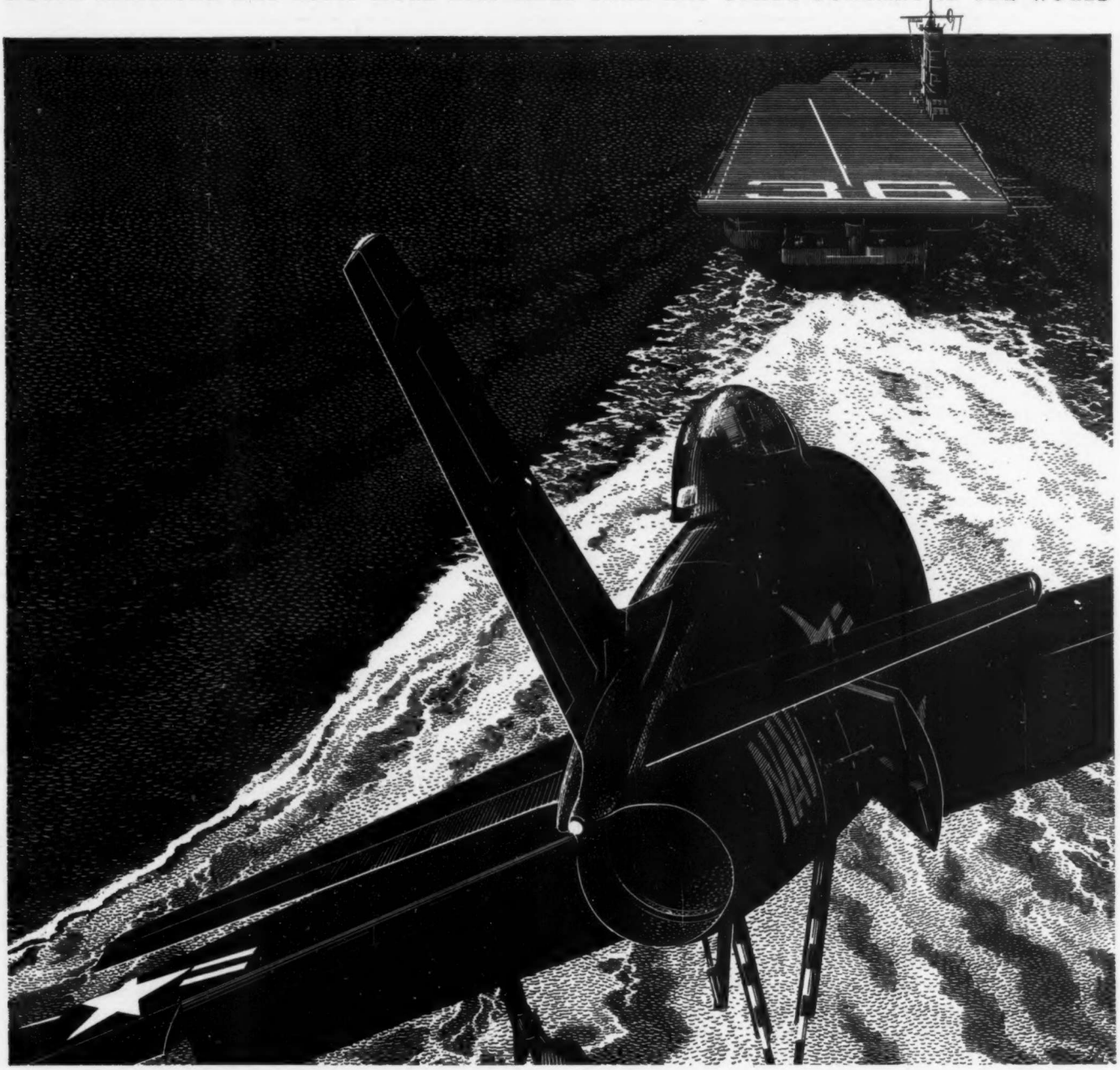
While only of very recent date, the recovery is widespread and has already made up half of the decline that had occurred in industrial production. The rate of inventory liquidation has sharply abated, and we are soon likely to experience some rebuilding of inventories. The projected decline of Federal spending is less than in the past two years. State and local expenditure will probably continue to expand and more than offset any further decline that may occur in Federal expenditure.

The recent increase of housing starts and the rush of applications to Federal agencies for mortgage insurance or guarantees promise that home building will continue to mount for some time. The recent high level of commercial building contracts is practically sure to mean a high level of expenditure for this type of construction over coming months. The prospects for plant and equipment expenditure are more uncertain; however, rising orders for machinery, to say nothing of the new plans and revisions of old plans that are likely to accompany continued recovery, give a basis for expecting that this broad category of expenditure will soon join, though perhaps only modestly at the start, the general economic advance.

In view of the resurgence of the economy of Western Europe and the reduction of restrictions against dollar trade, it seems likely that our exports will continue to increase. The spirited behavior of retail sales in recent months has borne

(Continued on page 52)

NORTH AMERICAN HAS BUILT MORE AIRPLANES THAN ANY OTHER COMPANY IN THE WORLD



FURY ON THE HIGH SEAS

U. S. Navy FURY JETS . . . fast and rugged . . . mean new and greater striking force for this country's sea-borne airpower. Capable of speeds in excess of 650 miles an hour and armed with 20 mm cannons, swept-wing FURY JETS emphasize advanced Navy might in the air.

Latest of the FURY series to come off North American production lines is the FJ-3 . . . faster, more powerful companion of the Marine Corps FJ-2 . . . and the fourth in this growing fighter family, the FJ-4, is now going into production.

Research and development make North American foremost in aircraft, rocket engines, guided missiles, electronics and peaceful applications of atomic energy.

ENGINEERING AHEAD FOR A BETTER TOMORROW

NORTH AMERICAN AVIATION, INC.

out earlier surveys of consumer attitudes. Further expansion of consumer spending may be expected as economic recovery cumulates.

Beyond these indications of immediate or short-run prospects is the fact that new firms are being established at an increasing rate, and that the offices of architects are reported to be bursting with plans for new homes, schools, and all sorts of commercial and industrial projects. Still further in the future, but already a factor in business thinking, is a new national highway system, which will create great economic opportunity in many directions.

In the course of the current year, the economic situation may therefore be expected to continue to improve. The gross national product increased from an annual rate of about 355 billion dollars in the third quarter of 1954 to about 360 billion dollars in the fourth quarter. With economic activity continuing to expand, it is reasonable to expect that the Nation's output within the coming year will approximate the goals of "maximum employment, production, and purchasing power" envisaged by the Employment Act.

At this juncture of our economic life, when confidence is running especially high, it is well, however, to keep in mind the sobering fact that there is no way of lifting more than a corner of the veil that separates the present from the future. How long the current phase of expansion will continue before new international trouble or a cyclical reversal of business occurs, or how far the expansion will carry, it is impossible to say with great assurance. The uncertainty of economic predictions requires that the Federal Government be prepared to adjust its policies promptly if economic events should not bear out current expectations.

Over coming weeks or months we should, however, be careful not to confuse seasonal fluctuations in employment or special fluctuations of individual industries or markets with over-all economic trends. It will prove helpful to keep in mind that a business recovery never retraces the precise path of the preceding contraction, and that this divergence is apt to be sharpest in postwar movements. The prosperity that some industries and localities attained during the Korean conflict, and which they have now lost, will not be regained quickly in all instances. Here and there the process of readjusting to reduced markets may be prolonged, although it will be greatly eased as general economic expansion continues.

We must also remember that, just as economic expansion resolves old problems, so it often brings new ones in its train. History tells us that industrial disputes have usually been more frequent in periods of expansion than in periods of contraction, and that industrial disputes sometimes have serious economic repercussions. History also warns us that activities which involve the discounting of a long future, as in the case of home purchases or the pricing of corporate shares, may be carried to excess in the course of a business expansion.

Fortunately, when speculative trends develop, they usually become self-corrective before they become excessive. It is highly desirable that corrective movements, testing the soundness of various parts of the economy, be scattered over a period of time rather than culminate at the same time. As the recent increase of stock margin requirements by the Federal Reserve Board has demonstrated, the Government is mindful of its great responsibility to help assure balanced economic growth.

It is essential to keep a close watch on financial developments. Continued economic recovery must not be jeopardized by overemphasis of speculative activity.

• • •

Since our economy is currently operating at rather high levels and a recovery from the mild decline of last year is well under way, we should strive this year to bring Federal cash receipts and cash expenditures into balance. With huge expenditures for our national security continuing, the financial requirements of the Government will not permit reductions this year from present tax rates. Prudence requires that the lowering of the corporate income tax and of excises, scheduled for April 1, 1955, be postponed.

It should, nevertheless, be recognized that present taxes are still a heavy burden. Lower taxes would tend to encourage work, promote more efficient business practices, and create more jobs through new investments. Fortunately, with our economy continuing to expand, we can look forward to larger Federal revenues from existing tax rates. This, together with further economies in expenditure, should make possible next year another step in the reduction of taxes. Congress might then consider enacting a general, though modest, reduction in taxes and, at the same time, continue the program which was begun last year of reducing barriers to the free flow of funds into risk-taking and job-creating investments.

• • •

Since the anticipated balance in the cash budget for the fiscal year 1956 will involve a deficit in the conventional budget of 2.4 billion dollars, it is clear that the debt limit will have to be raised. The increase should be large enough to provide the Treasury with the necessary latitude to do its job. It would be imprudent to set a new statutory debt limit which left virtually no margin for unpredictable fluctuations in Federal receipts and expenditures. A higher limit will in no way lessen the persistent efforts of the Administration to reduce expenditures further, but it will enable the Treasury to discharge its financial responsibilities more effectively.

• • •

The past quarter-century has taught our generation to be highly sensitive to economic changes. The protracted depression of the thirties, and the inequities of wartime and postwar price inflation, have made us intolerant of extensive fluctuations in incomes, in employment, or in prices. Economic statistics are now closely scrutinized and widely commented upon by men and women in different walks of life. The American people apply more exacting standards to the performance of our economy than they did fifty or even five years ago. They expect their Government to pursue policies that foster a smoother rate of economic growth than was experienced in the past.

The growing confidence of people in their Government's ability to moderate economic fluctuations is desirable and not misplaced. A better-informed public with an increased awareness of economic change will tend to bring about higher standards of economic performance. This increased knowledge on the part of the public should, however, be accompanied by a realistic understanding of the practical difficulties in attaining increases in total production, employment, and personal income, entirely free from interruptions. Neither in our own history nor that of any other country has an economy ever attained this ideal for a long period of time.

The experience of Government in dealing with fluctuations in employment and incomes is not of long standing, and there is much yet to be learned about the problem of economic stability. For this reason, it is to be hoped that rigidity of judgments will not interfere with continued flexibility of policies and administration.

We have learned from experience that the Government can do a great deal to moderate economic fluctuations, but there is as yet no good basis for the belief that it can entirely prevent them. A democratic government needs time, especially when current reports are conflicting, to meet a given economic situation. Moreover, the effects of its actions—whether in augmenting or in restraining demand—require time to work themselves out. Government ought not to be continuously veering its course, although it should act promptly and decisively when a threat to economic stability emerges.

NO NEED TO BOMB CITIES TO WIN WAR

A New Counter-Force Strategy for Air Warfare

EDITOR'S NOTE: Here is a new strategy for the United States in the H-bomb era, drawn up by an experienced military planner.

"Massive retaliation," in this strategy, no longer would threaten enemy cities. Both big bombers and aircraft carriers become largely outmoded. Total-war theories become "100 per cent foolish" in the nuclear age. But war is expected to last only a few weeks.

The ideas contained in this plan are known to have been the subject of serious discussions recently among high military officers.

Author of the plan—Richard S. Leghorn, Colonel, USAFR—was on active duty in the Office of Development Planning in the United States Air Force until 1953.

Colonel Leghorn served in World War II as an air-group commander and photo-reconnaissance pilot throughout the European campaign. Later he participated in the Bikini atomic tests and was responsible for the gathering of important data from aircraft encircling the scene. He is a graduate in physics of Massachusetts Institute of Technology, and is now one of the executives of the Eastman Kodak Company.

Tactical use of nuclear weapons against solely military targets is the basis of his plan. Enemy industry would not be threatened. Neither would enemy population centers, unless U. S. cities were hit first.

"Nuclear punishment" to fit the crime would be inflicted on any aggressor—against his armies in the case of a ground attack, against air bases in the event of air attack against his borders in case he tries to support an aggression against a neighbor.

For civil defense within U. S., the plan calls for shutting down all major cities when war begins, moving populations out and small caretaker forces in, for the few weeks of war's "decisive phase."

For waging war, this strategy envisages using only forces and stockpiles that are in "fighting position" at war's outset. Industrial build-up during war becomes less important, with time for the decision measured in days or weeks.

"Small wars" are covered by the plan, too. Tactical attack with nuclear weapons would compel the aggressor either to quit or lose his aggressive forces. In this way, the author insists, both Korea and Indo-China could have been won by the West and Formosa could be held now.

Basic revision of the armed services' organization is called for, finally, with five types of military command replacing old Army, Navy and Air Force commands.

Conclusions concerning the plan are the views of Colonel Leghorn, and not necessarily those of this magazine.

Col. Richard S. Leghorn
(United States Air Force Reserve)

tells—
HOW NUCLEAR WAR MAY BE FOUGHT

by Col. Richard S. Leghorn

The thesis of this article is that the President of the United States should consider announcement of the following policy:

"If any of our allies or the United States itself is attacked by an aggressor with conventional armies, the United States will punish the aggressor by using tactical nuclear weapons to destroy his attacking units in the battle zone and the military installations in his immediate rear areas.

"If any such aggression is supported by conventionally armed aircraft, the United States will punish the aggressor by hot pursuit in the air and nuclear attack on his air bases.

"If the United States or any of its allies are attacked with nuclear weapons, the United States will use nuclear weapons to destroy instantly and utterly the nuclear stockpiles of the aggressor and the nuclear delivery capability of the enemy.

"The United States unilaterally renounces H-bomb and A-bomb attack on hostile cities, unless the cities of the Free World are first attacked with weapons of mass effect."

First: GROPING FOR A MILITARY POLICY

SOVIET AND CHINESE IMPERIALISM and the fundamental clash between Communist doctrine and Western political philosophy today present the United States and the Free World with the gravest challenge we have ever faced. The years since World War II have witnessed the West coming to grips with this challenge. A decade of cold war has been a frightening experience as we have struggled to meet first one onslaught and then another with improvised policies.

Since the Soviet threat was publicly recognized in 1946, we have examined and rejected as national policies the extremes of **peace-at-any-price,** and **preventive war.** We toyed with the idea of **"Fortress America."** We found **containment** too negative and **liberation** premature. We are now pledged uncomfortably to **peaceful co-existence.**

Although remnants still appear, we early discarded the peace-at-any-price thinking of appeasement and unilateral disarmament. Horse sense and experience have taught us that the only way to deal with an aggressor is by marshalling strength and displaying a will to use it. Preventive war, the other extreme, continues to be advocated in one form or another, particularly by the militaristic—though not by our military leaders. The Fortress America concept was quickly labeled as Maginot Line mentality and was short-lived; it is a vestige of isolationism, whose spirit lives on among national-

ists and go-it-aloners who would like to believe we can substitute a defensively fortified America for the earlier, natural isolation of our ocean-bound continent.

Containment was the initial response to Soviet expansion. But containment was a reaction, it was negative and therefore frustrating as a long-term policy. It left the initiative with our opponent. It led us to abandon captive peoples behind the Iron Curtain and embrace the status quo on our side, regardless of how incompatible it may have been with our concepts of democracy and just rule.

In early 1953 we had a premature burst of enthusiasm to do more than take a negative approach, but we found that liberation called for too much initiative, too soon. Bold action, even by non-military means, was feared by our allies to invite Soviet atomic blows. This fear was unrealistic since destruction of the U. S. and exploitation of an undamaged and enslaved Europe constitute the logical Soviet objective. Nonetheless, it was a political fact.

Next we flirted with peaceful co-existence. This is a strange concept for America, not only because it was Lenin's label to denote a period of Communist consolidation before the next advance. In the first place, it implies that war can be avoided. As recently pointed out by Sir John Slessor, war with the Soviets cannot be avoided, only prevented—which is quite a different thing. Peace is not achieved in a community of nations just because everybody believes it desirable. War must be prevented, peace sought actively.

Peaceful co-existence implies there is no need to act to enforce the peace—that the community of nations is somehow different from other communities of human beings. Second, this concept implies that we can relax and forget the declared Soviet ambition to dominate the world, for which they continue to arm and agitate while endeavoring to conceal their aim with the big lie of "co-existence" propaganda—sheep's clothing for the Soviet bear. Third, peaceful co-existence pretends that evil is not there, and obliges callous neglect of those whom misfortune has imprisoned under the yoke of Soviet tyranny. Peaceful co-existence is a false step in attempts to find a satisfactory course between containment and liberation.

The policy I propose we consider is the **pursuit of enforced competitive peace.** Two operative ideas are embodied in this concept. The pursuit of enforced competitive peace implies a coordination of force and positive political competition. Deterrent force can prevent aggression, anywhere on the globe. Thus protected, we can wage political competition against Communism.

The enforcement of peace is a long-acknowledged task of human society. The problem is no different between nations than between individuals. Public peace has always been maintained by the exercise of punishment. Peace is best maintained when punishment fits the crime and when punishment is well-known beforehand to any who might contemplate violating it.

Until international authority is empowered to inflict adequate punishment to enforce world peace, nations must band together to meet the problem through systems of collective security. With its nuclear plenty and dynamic economy, the United States is the strongest member of the Free World. We have begun to accept our broad responsibilities and recognize that we must lead the Free World in the enforcement of peace, until the day when a freshly constituted United Nations has authority commensurate with that responsibility.

The competitive spirit is psychologically appealing to Americans and is compatible with our instinctive pragmatism; we would relish competition with the Soviets as a test of which system can provide the best economic, social and moral climate. Out of enlightened self-interest, emphasis on the competitive aspect would impel us to resume our support of reform movements in Africa and non-Communist Asia, and to identify ourselves with the interests and aspirations of peoples instead of regimes, as heretofore necessitated by emphasis on containment at any political price.

The pursuit of enforced competitive peace enables us to take the initiative. It is a policy of containment only in military respects; it is affirmative in a political sense. We can identify vulnerable spots behind the Curtain, and in some cases, bring non-military pressures to bear. In promising, tangible terms, we can extend to all oppressed and captive peoples a warm welcome to join the Free World.

Long-term competition under conditions of enforced peace can bring changes behind the Iron Curtain. Conceived by Marx, Communist doctrine has undergone major revision, first under Lenin and later under Stalin. The Malenkov influence is now at hand, and there is no reason not to expect further adaptation. Forever faced with our deterrent force and competitive strength, Soviet policy can be compelled to reject its premise that capitalism must collapse, and its objective of world domination.

To achieve these aims, the United States must rely first on its own power. Insofar as possible we desire to supplement this power with the collective strength of like-minded allies. It may be our desire eventually to transfer to international authority the responsibility for and control of the means of enforcing peace.

But consider first what we face in efforts to enforce peace. What does conflict in the nuclear age mean and how well prepared are we to prevent it?

Second: ANOTHER LOOK AT DEFENSE

I. The Facts of Nuclear Life

AMERICANS ARE WORRIED AND UNEASY. One swift decade has seen war's destruction measured successively in tons, kilotons, and megatons. In nuclear war, names on casualty lists will be replaced by estimates in megadeaths. The measure of human anguish in war has been multiplied one million times.

As we learn more and more about the H-Bomb, new aircraft and guided missiles, and Soviet successes in military technology, we realize our security is shrinking. The cost of adequate defense mounts as the armament race intensifies. Short of surrender and without recourse to preventive war, is there no end to this trend toward less security at higher cost?

In the face of our difficulties, it is useful to examine four salient features of the current military situation.

1. The Soviets have nuclear sufficiency.

They have a quantity sufficient, in case they choose to use their weapons in this manner during World War III, to destroy so many of the population, cultural and productive centers of the West that we would lose, whether we won the war or not. The Soviets, who to date have announced five experimental explosions plus a series of further tests, can reasonably be presumed to have a few hundred bombs today —they will have more tomorrow, hydrogen and atomic. One hundred assorted modern bombs on target can knock out one-half of U. S. industrial capacity and tens of millions of Americans. The 100 largest cities of the NATO powers in Western

Europe contain one quarter of its population and a greater fraction of its industrial capacity. Two hundred bombs on city targets would destroy the Western world.

2. The U. S. enjoys nuclear plenty.

We have enough to satisfy not only all military needs, but also enough to begin a major program to develop atomic resources for peaceful use. It was publicly reported some time ago that the number of bombs in the stockpile would not be many years in reaching five figures. Since then new techniques have been announced which enable us to make more bombs with the same amount of nuclear materials. In a war, we are very likely to find ourselves more limited by the number of aircraft than by the number of modern explosives. They vary in size from artillery shells and kiloton A-bombs for fighter bombers to the reported 20 megaton blast of our present H-bombs. These weapons can destroy any surface target —an air base, a capital city, fleets of ships, troops in the field, and some targets buried underground. There is almost no limit to the type or number of targets we could destroy with our stockpile.

3. Nuclear weapons systems are cheap.

It is much cheaper to accomplish a given amount of destruction with nuclear weapons than by conventional means of war. It has been estimated that the cost of killing urban populations with nuclear weapons is incredibly cheap, just a few dollars a death. It is also very cheap to destroy factories or military targets with nuclear power.

Dividing the total annual budgets of the AEC by the presumed number of bombs produced, we find a cost per bomb of the order of a million dollars. While these explosives are expensive themselves, very little of the cost of a military weapons system is in the shell or bomb—all but a very small fraction of the cost is in the military unit that will deliver the explosives, and in its supporting supply system. We can recall that it took 330 billion dollars in four years of World War II to deliver the 2 megatons of high-explosives expended by the United States—or roughly 15 billion dollars to deliver 100 kilotons, the blast on one small-size modern weapon. Today 15 billion dollars annually will maintain a large, modern Air Force, which can deliver many thousands of larger nuclear blasts in a few days. Thus, even considering the effect of conventional bomb dispersion, we can say that to accomplish a given amount of destruction, nuclear fire-power is many times cheaper than conventional fire-power.

4. There is neither in being nor in view any satisfactory defense against nuclear air attack.

If the Soviets chose to use nuclear weapons against Western European cities, they would have an easy time of it. Recent appearance of their equivalent of the B-52 bomber, and prospects for air refueling their growing fleet of medium jet bombers, are ominous indications of what they might be able to do to important U. S. targets today and will certainly be able to do tomorrow. Strategic planning must recognize that the Soviets are no longer range-limited. Former Air Secretary Finletter estimates they will be able to deliver a mortal blow next year.

The late General Vandenberg announced two years ago that at best the Air Force could shoot down about 30 per cent of attacking aircraft. Even if the billions since poured into air defense have realized the hopes of scientific and military planners and doubled the batting average, one in three enemy nuclear bombers getting through to target is a suicidal prospect. This amount of air defense for our cities and military bases is mandatory for partial protection and as a supplementary deterrent, making attack difficult and expensive for the Soviets. But we cannot expect air defense to save America in the face of determined Soviet blows. At best, our improved radar-fighter screen only doubles the price of success to the Soviets.

Even more ominous is the IBM, the intercontinental ballistic missile, which returns to earth from the outer atmosphere with a velocity approaching that of a meteor, about 20 times the speed of sound, and against which a defense has scarcely been dreamed of. Ten years ago, the Germans were firing against London V-2 ballistic missiles with a range of a few hundred miles. They had thousand-mile missiles on the drawing board. For almost a decade now the Soviets have employed some of the same research facilities in East Germany and also the services of many German scientists and engineers. We can no longer afford to deprecate Soviet skill in military technology, as their development of the MIG-15, the A-bomb, and the H-bomb attest. It would not be illogical to assume that with this scientific head start from East Germany, plus their own historic interest in rockets, the Soviets have given priority to this intercontinental missile in the expectation that if successful, they might essentially skip the long range bomber stage in intercontinental weapons development. We were only four years ahead of the Soviets with the A-bomb and ten months with a thermonuclear explosion. It is very possible that we will lose the IBM race, whose conclusion is only years away.

When the Soviets successfully engineer this near-absolute weapon, our elaborate and costly radar-fighter screen will not be effective against it. Faced with hydrogen-headed missiles of meteoric re-entry speed, our cities will be virtually defenseless.

A further threat, emphasized by Attorney General Brownell and FBI Director Hoover in a nation-wide warning, is agent delivery. Covert attack might add to the seriousness of mass attack from the air.

There is also the menace of nuclear missiles launched from submarines. Against this form of attack, anti-submarine defense, as in the case of air defense, can at best only increase the price of success to the Soviets.

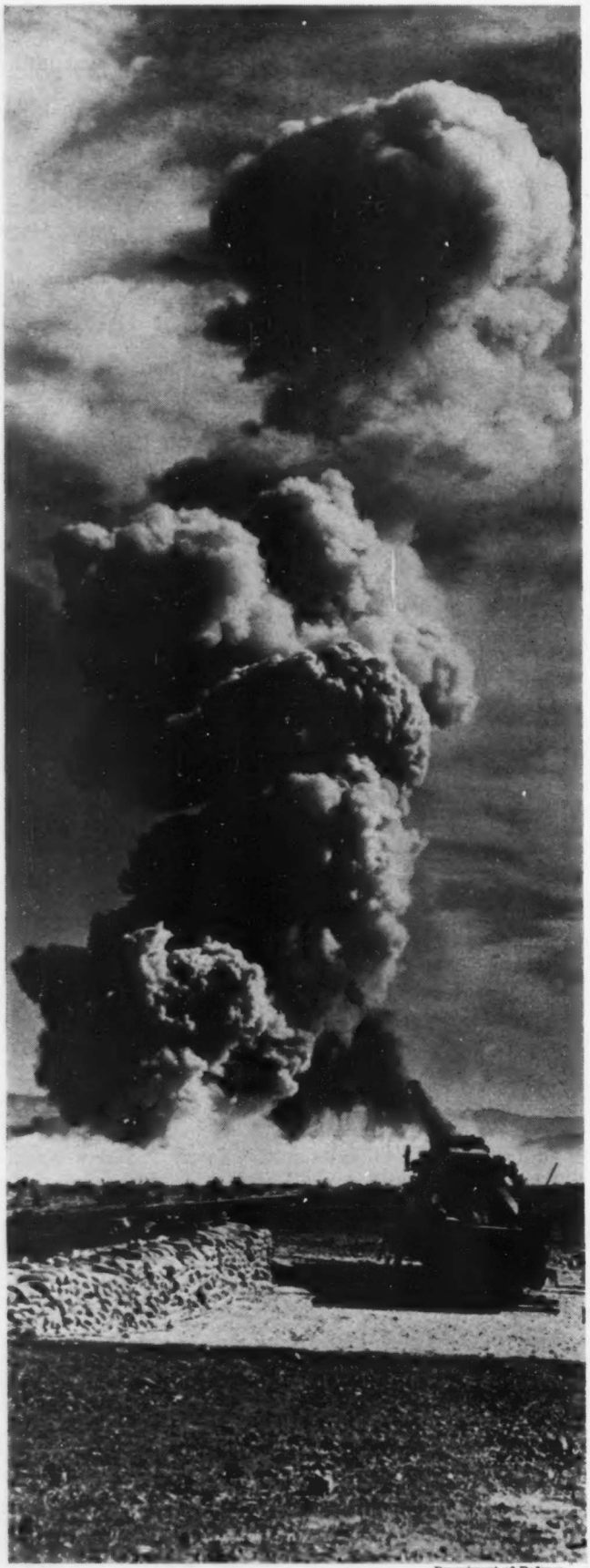
As for dispersion of population and industrial centers, Messrs. Cooper and McKean have recently itemized in *Fortune* the reasons why dispersal is of such questionable value. Against fall-out from a major hydrogen attack, defense is extremely difficult. While we must take all practicable steps including evacuation to save American lives, and must increase the cost of attack to the Soviets, no physical defense can provide adequate protection. More vital to the protection of our people is the ability to destroy Soviet nuclear weapons systems at their source in the USSR.

These are the four salient features of today's defense situation—Soviet nuclear sufficiency, U. S. nuclear plenty, the cheapness of nuclear weapons systems, and the impossibility of achieving acceptable security with any physical shield against nuclear air attack.

II. The Defense Problem

WITH THE FACTS OF NUCLEAR LIFE in mind, it becomes clear that a war of obliteration cannot produce victory in any real sense; both sides would lose formidably. Military action alone cannot bring victory in cold war. Yet without sufficient military strength we would lose in cold war. The only hope of gaining on Communism and Soviet imperialism is through nonmilitary action. You can't kill an idea with a pistol. But how do we get the military security that alone will free us for non-military action?

The defense debate so far has been chiefly concerned with military forces. What military units will give us more security



–Department of Defense

U. S. TACTICAL ATOMIC WEAPON
"We can bring our nuclear plenty to bear"

at less cost? More air wings, more divisions, supercarriers? Should we concentrate on "air-atomic power" or have balanced air, naval and ground forces?

Such discussion has not yet resolved the issue. It never can. Until the security issue is thrashed out on the level of strategy—strategy for acceptable security in the long term conflict with the Soviets—we shall never have the answers. The types of military forces needed can be settled only after the grand strategy issue has been resolved.

We now attempt to straddle two national strategies, neither of which is satisfactory, instead of evolving a clear course of action clearly shaped to the need.

On the one hand, we rely on our capacity for instant Massive Retaliation at times and places of our own choosing. In the absence of any clarifying statements as to just how we intend to use this power of annihilation, it is generally presumed that if D-Day comes—whether through bungling or intent of either side—we would use all our modern weapons to pulverize Russia—its airfields, its industries, its cities, everything. Our failure to define realistically just how we would use this capacity has tagged the strategy of Massive Retaliation with five major objections:

▶ **1.** As Indo-China demonstrated, it is no deterrent to localized Communist military ventures. This is because it is a true threat only in relation to total war. In less serious circumstances, where lesser countermeasures are called for, Massive Retaliation is a bluff readily called to our embarrassment.

▶ **2.** It engenders a climate of fear—fear of world destruction. Massive Retaliation invites massive, nuclear counter-retaliation. During the cold war the Soviets have profited immensely from this fear. They have turned the fear arising from our proclamations to their advantage in "peace offensives," to keep countries of the West divided, weak and neutral, and uncommitted countries uncommitted.

▶ **3.** In case World War III should come, Massive Retaliation implies that to win we would immediately undertake to smash everything in sight. To so invite Soviet counter-retaliation is simply to threaten national suicide if World War III should happen. Still busy with the problems of reconstructing the small fraction of the world economy destroyed in World War II, we hesitate to contemplate reconstruction of the very large percentage which such a World War III would leave in ruins. As World War II demonstrated, to carry out wanton massacre of largely guiltless peoples would solidly unite any survivors in firm opposition to us and drive them into the hands of their regime. The prospect also makes us morally uneasy. A war of attempts at mutual obliteration is moral as well as practical nonsense. We can derive no satisfaction from a policy which is confined to wreaking vengeance for our deaths.

▶ **4.** It is argued that Massive Retaliation is intended only as a deterrent to war. If war came, we would not, it is said, actually use our military power in this manner. "Ike would never let the boys do it." But if we build our aircraft and bombs, and train all our crews to fight a war of obliteration, it may well be impossible, when D-Day comes, for us to fight any other kind of war.

▶ **5.** Massive Retaliation minimizes the temporary advantage we hold by possession of a greater number of nuclear bombs. To conduct Massive Retaliation, relatively few, large bombs are required. The Soviets have a sufficiency of bombs and the U. S. and the Soviets will soon reach a stand-off in the art of nuclear annihilation. The satisfactory strategy for us must be one which enables us to capitalize on our quantitative advantage. With Massive Retaliation, our excess can have little effect on the balance of power.

We also maintain today a conventional strategy dating from World War II. Pursuing this strategy has four major objections:

▶ **1.** A conventional, or non-atomic, strategy hands the Soviets and their satellites a big military advantage. They are relatively stronger than we in conventional ground forces. Only our atomic superiority gives us preponderance of power today. If we gave up this advantage, the Soviets would be encouraged to experiment with military ventures. Their ground forces could quickly take Continental Europe and Asia. It is most uncertain that the Anglo-American industrial base could out-produce the entire Eurasian war economy sufficiently to mount a successful recapture of Europe and invasion of Russia. In the remote possibility that we could, it would be a victory so expensive that we would have lost what we were fighting for. World War I broke the power of France as a world leader and World War II almost broke the back of England. A non-atomic World War III might break the power of America.

▶ **2.** Nuclear weapons are all that stand between us and the advance of massed Communist armies. To surrender their use almost guarantees our losing World War III, if not the cold war beforehand. Unless simultaneous and progressive reduction of other major weapons of war can be arranged under enforceable conditions, we can never agree to an international ban on nuclear weapons alone, even if the Soviets would alter their intransigence on inspection and enforcement. Without our agreement, no ban is possible on nuclear weapons alone. It is unnecessary, therefore, for us to plan to fight a non-atomic war. Proponents of conventional forces argue for the maintenance of World War II armaments "just in case" nuclear war should be outlawed. But how can it be outlawed without our agreement and why should we agree unless other major weapons are outlawed as well? The irrational attempt to justify conventional forces should not be allowed to confuse the issue and add unnecessarily to the defense budget.

▶ **3.** A non-atomic strategy is immensely expensive to prepare for as well as execute. To attempt enforcement of the peace by balancing Communist non-atomic power with conventional force would require a stupendous defense effort for the Free World. This effort would have to be maintained for many decades—not just a few years as in World War II. The Communists direct more than twice the population controlled by the NATO and SEATO powers, and theirs can be regimented more readily for military and war-production purposes. Although they produce only 40 percent as much steel as America and free Europe, they can direct a higher percentage toward military production. To compete, we would have to have such a program of universal military service and give up so much consumer production that the necessary regimentation over the decades might back us into un-American extremes of statism.

▶ **4.** In the cold war, pursuing a non-atomic strategy presents a baffling predicament. Either we lag behind Soviet military production and cannot stop Communist expansion by conventional means, or we organize our industry and manpower for war so that we lack sufficient resources to devote to the development of free centers of political, economic and social strength around the Soviet periphery. Instead we sink toward the Soviet level of regimentation. Heads, the Soviets win with their superior non-atomic military power; tails, the Free World loses freedom, whose preservation is the very object of our struggle.

In attempting to pursue World War II and nuclear strategies simultaneously, we have badly confused the tools for each type of war. We try to put conventional elements of military power in a nuclear strategy, and nuclear elements in a con-

—Sovfoto

SOVIET GROUND TROOPS
"They are relatively stronger . . . in conventional forces"

ventional strategy. They don't fit. The result is that we are not prepared today to fight either type of war satisfactorily.

This point is particularly obvious in our approach to the "mobilization base"—the peacetime structure from which production for war can be increased rapidly after D-Day. It is not yet fully recognized that whereas a mobilization base is the key element of national power in conventional strategy, it is completely unnecessary in nuclear strategy. This point is important enough to warrant elaboration.

In conventional World War II, the Germans made the great strategic error of assuming that initial power was the key to victory. They failed to recognize that the ability to create new military power was the decisive characteristic of warfare at that time and they failed to estimate properly the U. S. ability and will to mobilize. The Allies very logically attacked the Axis mobilization base; to bomb an opponent's factories to retard his rate of build-up was sound strategy in those times when ability to mobilize additional military power was the key to victory. Most of the Allied mobilization base remained safe and sound in North America. With this "arsenal of democracy," Allied mobilization was more than enough to offset initial German strength. Our war production was the decisive factor in the conflict. Little wonder, perhaps, that we treat the mobilization base concept so tenderly today.

But what folly to assume that because a mobilization base was of key importance in a conventional war, it necessarily will be of value in a modern, nuclear war. Because of the revolution in fire-power, the outcome of nuclear war will be decided in days or weeks and not in years, long before any mobilization base could produce power enough to affect the outcome.

In four years of World War II, the U. S. fired or dropped two million tons of high explosives. In modern parlance this is two megatons, only a fraction of the explosive force of a single H-bomb set off early in 1954 in the Pacific. Making allowances for the fact that well distributed conventional bombs can do more actual damage than one equivalent centralized blast, still 100 assorted modern bombs on target will destroy about as much as did all U. S. high explosives in World War II. And a 137-wing Air Force can drop one hundred times 100 modern bombs in just a few days.

A few days of a nuclear World War III would see something like one hundred times the destruction of four years of World War II. The outcome would be decided in a few weeks at the most, and would depend on military forces and stockpiles in fighting position at the outset. Those built after D-Day from a broad mobilization base, however efficiently organized, and shipped across oceans would not be available until long after the issue had been decided.

Despite recent announcements calling for expansion of nuclear air power at the expense of the balanced forces, there are indications that the Administration plans modern strategy for a possible U. S.-Soviet conflict, while continuing conventional strategy for a possible U. S.-Chinese conflict. Indications of this sort are examples of improvised planning based on dubious assumptions. The assumption is made that we can successfully contain Chinese military ambitions without a phenomenal expansion of conventional surface forces. It overlooks the fact that we do not have the preponderance of conventional power in relation to China; that we could not conscript enough Americans to achieve such a preponderance. It further overlooks the prospect that China may some day possess nuclear weapons itself. There is no basis for the premise that Anglo-American and Soviet monopolies on nuclear power will last. With nuclear weapons China, Argentina, Japan, or Yugoslavia could radically change the world balance of power. Planning which ignores such possibilities is hindsighted today.

Third: A NEW APPROACH

III. Nuclear Punishment

FACED WITH THE FACTS OF NUCLEAR LIFE, and committed to not one but two inadequate policies, we ask whether there is another course of action which would lead to truer security. There is, of course, no strategy which will provide **absolute** security. The question is whether **acceptable** security can be achieved at tolerable cost. Setting this as our objective, we can answer this question affirmatively if we act as follows:

A. Drop conventional World War II strategy.

B. Dispose of massive retaliation and substitute a policy of NUCLEAR PUNISHMENT.

C. Specify a series of Nuclear Punishments to be inflicted on any nation committing aggression against the U. S. or one of its allies, the punishment to fit the crime as follows:

▶ **1.** Punish an aggressor who attacks with conventional surface forces by destroying, with tactical nuclear weapons, his units in the battle zone and immediate rear areas.

▶ **2.** Punish aggression which is supported with conventionally armed aircraft by hot pursuit in the air and nuclear attack on air bases of the aggressor.

▶ **3.** Punish nuclear aggression by using our nuclear plenty to destroy instantly and utterly the nuclear stockpiles and the entire delivery capability of the aggressor.

▶ **4.** Withhold nuclear attacks on aggressor cities unless the aggressor first attacks cities of the U. S. or its allies with weapons of mass effect.

Recent delivery of atomic cannon, rockets and missiles to modern Army forces now in the field enable immediate use of tactical nuclear weapons to neutralize conventional ground and air forces with economically feasible military power of our own.

The ability to destroy nuclear military forces exists in the **counter-force** capability of the Strategic Air Command, the Tactical Air Commands, and the offensive Carrier Task Forces.

The capacity to wipe out cities in retaliation against nuclear attack on our cities exists in the **counter-economy** capability of the Strategic Air Command.

With the exception of weaknesses in our intelligence, a policy of Nuclear Punishment can be carried out today. It is fully consistent with historically accepted principles of justice. It substitutes punishment to fit the aggressive crime for our present reliance on threats of ultimate punishment to meet all situations.

The intent to retaliate directly against conventional forces of satellite or Chinese Communist nations is asserted, in case they grab for more territories of the free world. The intent to strike massively and instantly against Soviet nuclear forces in case of Soviet military aggression is made the cornerstone of our defense policy. The ultimate punishment, annihilation of Soviet cities, is reserved in case the Soviets commit the ultimate crime by first attacking our cities with weapons of mass effect.

IV. Stopping Local Aggression

IN WORLD WAR I, defense of a line was elaborate and costly, but assault was much more so. In World War II, armor and close air support gave the advantage to the offense. Now the pendulum has swung back drastically. The revolutionary

increase in fire power which nuclear weapons place in the hands of defending troops provide the defense with near absolute superiority at relatively low cost. With tactical nuclear forces, the defense can render a battlefront virtually impenetrable. The new Army, employing highly mobile cellular units, can readily stop any remnants that get through.

It is now feasible to draw a line between Communist and free Asia, for example, and hold this line against massed surface forces. We can stop surface aggression by decimating attacking units with existing nuclear bombs, cannons and rockets. To avoid unwarranted suffering by the people of the aggressor nation and to punish only forces of the regime, the attack can be limited, insofar as possible depending on topography, to an area within about 100 miles of the aggressor's border. Aggressor units moving through this communications zone to the front can be destroyed by nuclear weapons faster than they can be brought up from the interior.

Presumably the battle front would first extend over territory of the friendly ally. To avoid punishing our ally rather than the aggressor, we would endeavor first to destroy the aggressor's reinforcements and logistics in the communications zone, cut off aggressor units in allied territory, and thus force their surrender. We could refrain from nuclear operations on friendly territory unless our ally considered them militarily necessary. If the aggressor should support ground aggression with conventional air forces, we would punish with nuclear devastation his air forces and bases involved, whether in the communications zone or behind.

Penetration behind the communications zone to attack the aggressor's interior is unnecessary, as neutralization can take place when military forces of the aggressor enter communications and battle zones. Agriculture, cities and industrial complexes behind the 100 mile communications zone in aggressor territory need not be attacked.

We would endeavor to prevent air attack on our ally's interior by announcing our intention not to retaliate against the enemy interior, unless he first attacks our ally's.

Our reaction to each of these forms of aggression would be made quite clear beforehand. The aggressor would know full well not only the consequences of his initial aggression, but also the multiplied retaliation which would befall him if he were to resort to more flagrant methods of aggression. Sure knowledge of multiplied punishment can prevent brushfire wars from spreading to major conflagrations.

Suppose the aggressor attacked with nuclear weapons? Our present superiority in these devices makes it extremely doubtful that the Soviets would support local Communist aggression with weapons from their own nuclear stockpile. They are obliged to reserve their nuclear striking power, inferior to ours in quantity, for attack on our air bases in the event of World War III. An exchange of nuclear blows along a battlefront would render it completely static, so that Soviet commitment of nuclear weapons would not enable their surface forces to advance.

But if the Soviets, or any nuclear-equipped aggressor, employ nuclear weapons, "hot pursuit" would be our announced reaction. In this event, we would attack instantly and massively all the nuclear stocks, forces, and bases of the aggressor nation. In destroying its nuclear capabilities, we would make clear that no cities would be attacked unless those of our ally were first attacked. Our unquestioned ability to commit overwhelming nuclear plenty immediately from remote bases could be used to stop and prevent the spread of any type of local military aggression, conventional or nuclear.

Nuclear strategy is now construed as applicable only in all-out global war. But, in Asia, Mao Tse-tung's generals are second only to the Soviets in power to fight conventional war. Thus Mao, whom the defeat of Nationalist forces against 3-to-1 odds has revealed to be a strategist as brilliant as the world knows today, has enormous room to maneuver. He can threaten, bluster, wheedle and attack. He can commit forces anywhere along his periphery to satisfy Chinese imperialist ambitions with virtual impunity; the manpower cost is irrelevant to China. By threatening war to obtain counter-threats from the U. S., he drives a wedge between us and our allies, and secures bargaining points for furthering Chinese political ambitions in the U. N. and elsewhere. His military capacity also constitutes a good bargaining point with Moscow in his efforts to extract more economic and military aid. His blustering sets up the external scape-goats to excuse his internal program of "everything for the armed forces" and vast industrialization at the same time.

We cannot hold local Communist land forces at bay in adventures of the Korean type by relying on conventional forces for situations in which the aggressors are willing to commit superior numbers of troops. To stop Mao and save Asia, or any region where any aggressor may start local wars, we must deny them their conventional superiority and throttle their freedom to maneuver diplomatically with threats. We can do this only with the ability and will to commit tactical nuclear weapons.

In the stalemate thus achieved, the Communists would have only two choices: to halt aggression, or engage in total war. The latter imposes on them the gravest risks of ever more murderous punishment.

Suppose the Soviets counter our announcement of Punishment policy with the threat to A-bomb New York the instant we explode one nuclear weapon in an effort to stop local aggression. Would we risk starting a major conflagration by using nuclear weapons to put out a small fire?

As long as we possess nuclear superiority, it is illogical for the Soviet to carry out such a threat. The Kremlin is well aware that an attack on New York would bring immediate disarmament of all its nuclear forces and perhaps untold destruction to Soviet cities. With our nuclear plenty the Soviets would be powerless to prevent it. The Kremlin would be no more.

In short, such a Soviet threat would be pure bluff. We would require, however, the judgment to recognize it as such and the fortitude to call it. Our failure to do so would be disastrous. The alternative would be to resign ourselves to Communist domination with conventional forces in the nuclear age.

V. Winning a War With the Soviets

GENERAL TWINING, CHIEF OF STAFF of the U. S. Air Force, has remarked, "The best way to prevent war with Russia is to be able to win." When we concentrate on planning to win, we must not lose sight of the fact that our real objective is to prevent. But how to win needs first to be considered. What is the best way?

We must have nuclear weapons systems ready before D-Day which are superior in number and quality to engage Soviet nuclear forces. These weapons, which must be hidden from attack and cocked and aimed at Soviet nuclear forces, constitute the core of our military might. We must launch our strategic counter-attack instantly and massively against Soviet nuclear weapons systems at H-Hour, **without dissipating their use on other, indecisive targets.** This course of action must be the crux of our major strategy. The emphasis must be on **counter-force** strategy, not **counter-city** strategy.

United States and Soviet equality in a war of annihilation is fast upon us. Next year, if we both choose to use our nuclear power against cities, we could destroy perhaps 75 per cent of major Soviet cities; they could destroy perhaps half of ours,

particularly as we assume they will have an aggressor's major advantage of surprise. The correct figures do not matter—each antagonist would be dead as a nation. You can't kill a man deader than dead. We can no longer extract a balance of power advantage in a war of counter-city blows.

Therefore, our military advantage—if we are to have one—must be sought from superior ability to destroy Soviet nuclear military forces. In the brief interval between the first Soviet nuclear explosion of 1949 and their acquisition of nuclear sufficiency, the military strategy game that we thought we could play **successfully** with the Soviet has changed completely. Before 1949 our ability to annihilate was unchallengeable; the Soviets had no way of countering it and the balance of power ran strongly in our favor. It was sound planning to base our military posture on massive blows aimed at the heart of Russia.

After 1955 the Soviets will have sufficient ability to annihilate. But because we have many more bombs than the Soviets, we can plan to use this advantage for the destruction of Soviet nuclear military forces. Poised in a counter-force posture, our superiority in nuclear numbers can give us an overwhelming military advantage. The balance of power can once again be swung markedly in our favor if we skillfully prepare to dodge, seek and kill Soviet nuclear air forces.

Nothing else really matters. The only military job we need to concentrate on at H-Hour is destroying Soviet nuclear forces. This battle will be the decisive phase of the war. If this is won, everything else is possible. If it is lost, everything will be lost.

History is strewn with failures to recognize early enough the decisive nature of new weapons. The British used the first tanks in 1915. But they failed to realize that tanks would be decisive only in a war of movement. Instead, they committed them unsuccessfully against a static front. The Germans were first to use strategic air power in a major war, against Warsaw. Early in World War II, they committed it indecisively against morale targets like Coventry and London, hoping to destroy the illusive "will to resist" and force the British to sue for peace. But as Chester Wilmot pointed out in "Struggle for Europe," had the Germans committed air power solely to attack on British air and naval defense units—had they used counter-force strategy—they would have won the Battle of Britain.

Unless we wish historians to list us with the others, we must reshape our military establishment to reflect the overriding military need of our times: a capacity for successfully exchanging instant nuclear blows with Soviet nuclear forces.

Our military recognized this publicly as long ago as 1951. In August of that year the late General Vandenberg said this at a Los Angeles press conference:

> Our own development of the atomic bomb, the fact that Russia has exploded such a bomb . . . and our own atomic bomb tests have changed the order of things. In the event of war, the emphasis, in point of time, must go first to destroy the enemy's ability to smash us and then wreck his warring potential.

The Government thus announced what must be done first, but adherence to the outmoded second step has so confused the issue that we have not today the best force composition to dodge, seek and kill Soviet nuclear forces.

The point has been made that industrial dispersion is of little or no value in nuclear war because the decisive phase will be too short for industrial production after D-Day to have any military usefulness. But quite the contrary is the case for force dispersion. In counter-force war the ability to dodge enemy attack is as critical as capacity in being to destroy enemy offensive capability.

The key technical problem is no longer one of range extension. This has essentially been solved and planning should recognize that neither antagonist is range limited. The problem has become how to achieve range capability without having bases which are vulnerable.

As long as we needed range and had only the technology to achieve it with bases that are vulnerable, and as long as the Soviets had but small numbers of nuclear bombs, our enthusiasm for big bombers and supercarriers was justified. But now our nuclear striking power is largely tied up in relatively small numbers of vulnerable sea and land bases. Today our long range air power operates mostly from large carrier and bomber bases, and both are highly vulnerable to bomb and missile attack.

Unless the naval program is revised to provide means of operating planes from the sea that are less vulnerable than carriers, and unless the big-bomber program is also recast to provide less vulnerable bases, both forms of striking power will be unprofitable in the long term. Huge bombers have to double as transports in flying endless hours across undefended water or Arctic waste; it is like building a naval tanker and destroyer as one unit. Vulnerable before it is airborne, vulnerable in the air, expensive to build and operate, and inflexible in its uses, the big bomber becomes obsolescent as the Soviets gain in offensive nuclear power. Although B-52's and supercarriers are at present useful in our operating forces, they are too expensive in relation to their military return. Also it is unfortunate to expend money on elaborate defenses to protect them, thus committing so much of our military strength to an unnecessary defensive posture.

To minimize the vulnerability of our attack forces to Soviet surprise assault, they must be essentially baseless and operate instead from a large number of small, dispersed, mobile or sub-surface sites close to the Soviet periphery. The techniques for doing this are all at hand, and we can now begin to build baseless, nuclear air striking power to replace existing equipment operating from vulnerable bases.

Already available are flying tankers to act as airborne refueling stations. From these airborne sites and from refueling strips with underground facilities, fighter-weight aircraft carrying nuclear bombs, such as the F-84F Thunderstreak, can now penetrate Soviet defenses and reach most targets with air refuelings. Medium bombers like the B-47, and later the newly announced supersonic B-58, can make the deep penetrations. Missiles can be fired from the air and sea, from mobile ground positions, and from underground sites. The advent of Lockheed and Convair vertical-take-off aircraft heralds the day when aircraft can be refueled and rearmed directly from trucks on highways.

The Navy can soon play a major new role in making dispersed refueling and repair sites feasible in the open sea. Revolutionary advances have resulted in Convair's hydrofoil jet, the Sea Dart, and its new turbo-prop flying boat. When fully developed, Martin's experimental 600 mph P6M Seamaster, the world's first multijet seaplane, can operate with complete flexibility in or near enemy waters. Refueling and rearming at sea from submarines, small craft and flying boats will solve logistics vulnerability problems. The day is nearing when obsolescent carrier task forces can be superseded by seaplanes, comparatively low cost weapons with far better chance of survival in nuclear war.

With further development of techniques of this kind, we can reshape our nuclear air power so we need no longer fear that our counter-attack strength will be gutted in one swift, Soviet surprise attack.

To overcome base vulnerability is the critical military reason we need allies. Baseless range extension is far easier with highly mobile stocks, refueling stations and other portable logistic facilities, staged and maneuverable close around the

Soviet periphery. This compelling need can be met only with full cooperation from like-minded allies. Such collaboration is politically feasible only if we offer them full military partnership in our efforts to stop Communist aggression.

The Iron Curtain has made our intelligence problem extremely difficult. Confusion about strategy has compounded the problem. Because of our fascination with mass bombing, insufficient attention has further hindered progress in intelligence and reconnaissance on Soviet military forces.

Taking the emphasis off economic targets and concentrating on nuclear-force targets will improve the usefulness of conventional intelligence and reconnaissance techniques. Airborne methods offer attractive possibilities if we discontinue the use of obsolete B-29 photo reconnaissance aircraft near Soviet borders. The post-war revolution in military technology can provide better techniques than this.

Looking to the future, journals have been full of reports of the possibilities of an earth-encircling space platform a few hundred miles up that could be used for observation purposes. The New York *Times* reported on December 22, 1954 that the combined efforts of the military services were being devoted to studies of "earth satellites." The present state of the aeronautical art makes the satellites feasible in the not-too-distant future. A few simple calculations, assuming lenses no larger than those now used in aerial photography, show that these might see, and perhaps return to earth by electronic means, gross details of larger military installations.

Counter-force strategy requires accurate bombing. But it is difficult for air crews to maintain high interest in pinpoint accuracy as long as our Air Force is preoccupied with the use of area weapons. When you plan to use a weapon whose radius of destruction is measured in miles, you don't worry about a few hundred yards, more or less, in circular error. As soon as the nation rids itself of a mobilization base mentality and corollary thinking in terms of blows against large city areas, it will then be easier to pursue again pinpoint precision in bombing.

But there is an even more important reason for pinpoint atomic bombing instead of hydrogen area bombing. This is because of fall-out. Fall-out is what killed fisherman Aikichi Koboyama, the world's first victim of a hydrogen bomb. When radio-active particles drop from the drifting clouds of a nuclear explosion, vast areas are contaminated. Scientists have estimated that both the United States and Russia have stockpiles which, if exploded in total war, would alter the basic conditions of life on this planet. By aiming large nuclear blows at the Soviet economy, the United States would in effect be committing genocide—**and for no justifiable military reason.**

We should instead use small atomic weapons, selected only to destroy or deny access to military targets. Penetration bursts rather than air bursts can in some cases localize the effects of fall-out and deny normal access to the area for long periods.

The lack of a clear course of action sufficient to the times has resulted in our building air power that is not very efficient for modern war. But once our military purpose is clear, we can very readily select the most suitable means.

As for the Russians, they should not change their course of action after we fully embrace a counter-force strategy. Logically they are already compelled to pursue one. They should attack our airfields first—they cannot afford to waste a bomb on our cities until our nuclear air force is substantially destroyed. They undoubtedly realize that a few weeks' production from our cities is inconsequential compared with their decisive task of first knocking out our air forces. They have been reported to be dispersing their own air forces as much as possible and to have rocket sites of relative invulnerability. They solve much of their intelligence problem by reading U. S. newspapers. Their present strategy should already be to hide from, seek and kill our nuclear air forces. The only impact of our change may be to accelerate their efforts along the same course of action.

The ability is in our own hands to return the destruction of warfare to the battlefield—the new battlefield of air power installations. The civilian realms of both antagonists can, if we so choose, be removed from the conflict.

VI. Withholding Attacks on Cities

THE MILITARY CONSEQUENCES of restraining counter-city blows after D-Day must be examined.

Military planners speak of war as having three principal phases—the build-up, the decisive, and the exploitation. It has already been made clear that for a nuclear World War III, the build-up takes place before the first shot is fired and the decisive phase will be over in a few weeks of nuclear blows after D-Day. During exploitation, the victor of the decisive phase normally uses political and diplomatic instruments, as well as his hard-won military dominance, to impose his will and terminate the war. The peace is partly negotiated, partly persuaded and partly forced.

In the decisive phase, just as fast as possible after H-Hour we must attack all Soviet aircraft, missiles, missile launching submarines, bases, stores of fuel and nuclear explosives, and the directly supporting military supply system. When these targets are located in or near cities, allowance will have to be made for bombing error. But if we make precision attacks on nuclear targets in cities, with explosives just sufficient for each target, our bombing accuracy can limit major destruction to about one-half mile of the target circumference. The pinpoint precision of our most experienced and best-trained crews in the last war is an indication of what can be done. The operations of the renowned British "dam-buster" squadron demonstrate that almost any degree of precision can be achieved for special targets—even to laying peneration bombs in the middle of something as narrow as a dam.

For purposes of the proposed policy, we should define a city as any population concentration not within the destruction radius of the size weapon required to destroy a military nuclear installation. There are no other military targets in cities which we need to bomb. Soviet production during the few weeks of the decisive period cannot affect the issue—any more than ours can. Nor can Soviet ground troops within cities affect the decision, even if they should be moved to the front during these few weeks. If we win the nuclear air battle, we can subsequently destroy those troops at will. Thus, there is no reason to bomb cities to get either ground forces or production facilities.

A false argument favoring D-Day attack on Soviet cities supposes that in the decisive phase, neither side will achieve nuclear air dominance because each side will knock out the nuclear military power of the other; there would then be a race to build conventional and nuclear weapons systems again. If we had in the meantime destroyed his industrial base, we would win this second build-up race. The fallacy in the argument is this: if we do not bomb Soviet cities we would have nuclear air power left over from the decisive phase to later bomb his production facilities if that should prove necessary.

By leaving Soviet cities alone during the decisive period of the war, we increase rather than decrease our military efficiency. As military strategists from the beginning of time have pointed out, to dissipate effort on non-decisive targets during the decisive phase is a cardinal sin in war.

If we win the decisive phase of World War III, Soviet bases and nuclear weapons systems will be destroyed, but vast land armies may remain. If our peace terms have been clearly and publicly defined beforehand, there is a strong

possibility that we could quickly terminate the war. We would use a combination of:

1. nuclear bombing of land armies and threats to do so;
2. a threat to pulverize production and cultural centers, after appropriate warnings to the populations to evacuate in keeping with our promise not to bomb population centers unless ours were first attacked;
3. diplomatic negotiation if the Kremlin proves tractable;
4. in case it does not, a strong propaganda drive to encourage dissident elements to rebellion; and
5. airborne military seizure of a few key administrative centers such as Moscow.

The high human and material costs of a lengthy exploitation phase can be saved if we have a carrot available to go with the stick—the promise of saving production and cultural centers from obliteration if the enemy will accept our peace terms.

In World War II, our policy of unconditional surrender, to teach the Germans a lesson they would remember, plus the lack of clearly defined peace terms or post-war political objectives, meant that, after the decisive phase ended with the Normandy invasion, we waged the exploitation phase using military power as the sole instrument of our national will. We did not offer any encouragement to, or try to negotiate with the dissident elements in Germany who recognized the decisive phase was lost, and some of whom even tried to assassinate Hitler a few weeks after the invasion. We did not try to isolate the people from the regime. Instead we and our allies were trying to destroy the illusive "will to resist."

Doctrinaire Douhet-ites of the airpower school have long advocated that the will to resist is a principal target in war, despite Coventry, Berlin, and much other experience invalidating the theory for general use. With our allies we used our dominating military power toward the end of World War II to bludgeon Germany and drive the people further into the arms of the existing regime as their only hope of succor, particularly after von Runstedt's failure in the Ardennes. This policy made necessary the costly march of Allied and Russian armies across Europe to Berlin, plus extra months of bombing an already defeated Germany. Finally, it installed the Russians in the unnecessary power vacuum we created.

There is another sound reason for withholding city attacks on the USSR. Ancient Chinese strategists called it the "silver bridge" of an acceptable alternative. Restrained, counter-city blows allow us to present a silver bridge to the Soviets, in the form of an acceptable alternative to destruction. If the Soviets do not wish to face annihilation, they can withhold attacks on our cities. Our own restraint would shield cities of the Free World against attack by weapons of mass effect—a shield which we discard if we plan to attack Soviet cities on D-Day. This shield can be tempered to great hardness by determined diplomacy making clear to the Soviets the substance behind our retaliatory threat and the attractiveness for them in restraining their city attacks.

A question which the reader may well advance at this point in the discussion concerns irrational Soviet behavior. Suppose, he may ask, in spite of our threat of retaliation and in spite of obvious military reasons impelling them to knock out our air bases first, the Soviets do strike at our cities with weapons of mass effect. If they should behave in such an irrational and un-Soviet manner, it is still best for us to concentrate on their nuclear air forces. Only when these are annihilated will our cities be free from attack. We can later threaten Soviet cities, after warning to populations, should that become necessary to terminate the war.

But the reader may press the question. If the leaders of the Kremlin are cornered in a war they are obviously going to lose, might they not behave fanatically, as an atomically armed Hitler certainly would have, and choose to destroy the world rather than lose to an opponent? We might deal with this prospect by again availing ourselves of a carrot-and-stick approach. In the course of announcing that we are restraining our counter-city blows unless United States or Allied cities are first attacked, we could aim a message specifically at Soviet air crews and Red military leaders.

In messages to aircrews we could hold out the carrot of sanctuary if, instead of carrying out assigned missions to bomb our cities, they fly over certain corridors to designated air bases. The stick is, of course, the threat to annihilate their families and cultural and economic roots in Soviet cities if they carry out their mission and bomb our cities.

Red military leaders would also be important targets. Political leaders of a nation facing defeat are often fanatical. However, military leaders are usually realists—the first to recognize when the game is up and plan accordingly. They are the professionals, in defeat and victory. In defeat, their position in the country can depend on their ability to save their people from useless death and suffering.

A carrot-and-stick approach to Red military leaders could be very effective in causing dissension between the armed forces and the Kremlin. The clash between Hitler and the German General Staff in the closing months of World War II in Europe is a recent example. A carrot-and-stick approach could facilitate ending a major conflict without having to resort to nuclear genocide.

A psychological-warfare campaign begun now can drive a powerful wedge between the Kremlin, Soviet military leaders and airmen should the Kremlin ever fanatically order attacks on our cities. Prospects for large-scale subversion of Soviet air crews and military commanders by this approach are favorable. Subversion of one pilot and termination of one nuclear mission thereby would more than justify the propaganda effort involved.

In broader aspects, the significant point of restrained counter-city blows is the fact that we renounce total war as a defense policy. If it were ever a useful concept—and this is doubtful—"total war" is 100 per cent foolish and useless to anybody in the nuclear age. A war of counter-city blows must be avoided at all costs—it is tantamount to mutual suicide. It will be a great day for America when we renounce nuclear bombing of population centers and abandon our 12-year adherence to the uncivilized policy of total war until unconditional surrender. It will be a greater day for the world when we can with assurance disarm.

VII. Coups d'Etat and Subversion

WE CAN USE Nuclear Punishment to prevent military aggression from without but how do we prevent aggression by violent seizure of power from within, by political infiltration, and by moral and psychological subversion?

The threat of Nuclear Punishment can be helpful in deterring internal seizure of power. Suppose the 1948 Communist coup in Czechoslovakia were to occur today. Suppose there were a U.S.-Czech Mutual Security pact which provided that, in the event of violent seizure of power in Czechoslovakia, the U.S. would be obliged to occupy and police the country temporarily pending prompt U.N.-supervised elections.

Under these circumstances, when Premier Masaryk and other government officials were seized and held incommunicado, U.S. paratroopers could have occupied the Czech capital from bases in Western Europe within a few hours. U.S. and Allied nuclear forces could have been standing by to seal off Czech borders in the event Soviet troops attempted

to intercede. Czechoslovakia could have been defended until its people had an opportunity to express themselves politically.

These opportunities could be made available not only through mutual security pacts with countries interested in bilateral agreements of this kind but also through arrangements between the U. N. and member countries. Elite troops for temporary occupation and military government could be made available on call to the U. N. by the U. S. and other like-minded nations. Eventually, U. N. Charter revision may be able to provide for such guarantees of political expression for all peoples.

Military action would be of no direct value in situations involving more subtle infiltration and true subversion. But strong military protection, furnished by a nuclear ally empowered by international authority to police a nation pending prompt U. N.-supervised elections, can do much to prevent the feeling of hopelessness which gradually undermines a country in the advance stages of political demoralization. In addition, the economic, technical, and informational resources of free nations can be brought to bear to compete with the forces of subversion at work in the country. With effective military power organized to frustrate violent aggression the Free World should succeed in non-violent competition to keep peripheral areas of the world from falling under Communist domination. If the Free World fails in this context, it surely deserves to lose.

The fact remains that the Communists have never been able to seize power outside areas occupied by their troops when they did not have two weapons: a militant Communist minority to seize power by violent means from within and massed Communist troops on the border to move in if internal efforts failed. This kind of a Communist operation can be stopped in its tracks by special mission forces and the threat of Nuclear Punishment to seal the borders.

Fourth: THE MILITARY PROGRAM

VIII. A New Power Base

UNDER A POLICY OF NUCLEAR PUNISHMENT the military power of our nation should consist of military forces **in being** erected from and resting on a modernized structure of national support. Active military forces, trained and equipped for immediate combat, are of overriding importance; forces potentially mobilizable from reserves of manpower and expandable production facilities are of no value in deciding the outcome of World War III, and of little value in preventing incidents around the Communist periphery from flaming into brush-fire wars. As emphasized earlier, a broad mobilization base is a useless foundation upon which to base our active military forces. Instead, we need a tripartite base of intelligence, research and development, and efficient production.

Intelligence specialists talk of two major determinations, intentions and capabilities. The only important aspect of the "intentions" problem is to obtain accurate and timely warning of aggressive attack.

The warning problem should be analyzed on a time basis; warning of the year of maximum danger; warning several weeks before an attack; warning several days before an attack; and warning several hours before Soviet aircraft pass our radar screen. The warning problem has several aspects. What kind of warning intelligence can we obtain and what kind is useful? How will we react to what degree of warning? The fallacy in counting on identity of any year of maximum danger has been broadly recognized. It is virtually impossible to get experts to agree on the most dangerous period, and those responsible for decisions have great difficulty taking effective action on the basis of such estimates because they know that shorter interval developments have great bearing on the exigencies of a D-Day situation. President Eisenhower has announced that his Administration believes in military forces constantly ready to meet the danger of Soviet aggression each and every year.

The fallacy in counting on several weeks' warning is that the Soviets, in the process of military training and maneuvers, can simulate preparations for real war so effectively that at very little cost they might force us into expensive reactions and keep our national nerves on edge. It is still useful to follow the movements of Soviet military forces and to try to infiltrate high military and government levels to obtain several weeks' indication of an attack. But we can hardly react to such indications except to put our intelligence services on 24 hour alert to watch for further developments.

A few days' warning is a different matter. Although the Soviets without great cost could perhaps simulate an attack to be launched in a few days, and although we cannot rely 100 per cent on such indications, the fact remains that with a few days' warning all our military forces can be made much more **combat-ready.** In effect, with a few days' warning we might multiply our fighting strength considerably. Such is the importance of a few days' warning to alert our military and for civilian defense that we can afford to pay handsomely for it.

The arguments on the importance of a few hours' warning are identical but more critical. The cost to the Soviets of spoofing is probably greater and much improvement in our fighting effectiveness will result from just a few hours' warning in advance of positive confirmation from our radar screens. We would probably send our bombers on their way but would we let them drop bombs? Should we tell bombardiers to do so when the Soviets pass our radar nets in large numbers?

We must first define the act of nuclear war and then announce that commission of the act by a possessor of nuclear weapons would trigger instant destruction of his nuclear capability. In the present period of U. S. nuclear plenty and Soviet sufficiency we can consider such an act the explosion of a nuclear weapon in an attack on the U. S. or one of its allies. Presumably, this is our present plan. Thus warning intelligence is vital to cock our military power but not trigger it. Rejection of the preventive war thesis means that warning intelligence and even radar early warning will not trigger our "bombs away."

Along with critically important warning intelligence, priority is shared by the need for full knowledge of Soviet nuclear air capabilities. For reasons already established, our nuclear air capabilities must continue overwhelmingly superior in quantity and quality, and counter-force strategy will require timely and accurate intelligence on Soviet nuclear forces to be effective.

As for other Soviet military capabilities, they are of secondary or negligible importance. Specific factory production data for target purposes is not significant when Soviet cities, if ever attacked, will be attacked with large area weapons. It is somewhat important to know something about conventional Communist military forces before the start of any local or total war, but such information is of secondary importance. If our aerial reconnaissance and combat intelligence units are reasonably competent in obtaining battle and communication-zone information immediately upon the outbreak of any war, it is of less importance to gather this information before war's outbreak.

One thing a proper intelligence base can do is help insure

that we are not preparing to overcome imaginary Soviet strength. Weak intelligence inevitably leads to estimates on the "safe" side. This can be a very expensive proposition.

The critical problems of military intelligence for a policy of Nuclear Punishment can be solved by three means:

▶ **1.** New technology must be exploited to obtain warning and information on Soviet nuclear air capabilities. In my opinion, research on the problem of pre-war intelligence is the area where the taxpayer will get the maximum return for his defense dollar.

▶ **2.** The second element in the first-line intelligence team will be rejuvenated methods of combat intelligence, particularly aerial reconnaissance able to operate around the clock in all weather conditions. Today combat intelligence systems are bogged down in detail—detail of the location and manning of specific units, detail of the personalities of military leaders, detail of the order of battle, detail on the minute characteristics of targets. This detail is of secondary importance when we are planning to use nuclear weapons. It clogs communication channels. The vital messages which give us the aiming points at which nuclear weapons must strike cannot get through to our bombardiers and artillerymen in time for them to destroy enemy concentrations which are certain to move rapidly. Modern techniques of combat reconnaissance, when put on an area basis consistent with nuclear weapons, can provide timely information on conventional communist forces after D-Day sufficient for nuclear targeting purposes.

▶ **3.** Conventional intelligence techniques should also concentrate on providing warning of imminent aggression, and information on Soviet nuclear air capabilities. These two problems are so overriding and the difficulties of operating in a tight police state are so extreme that conventional efforts should not be directed toward any other military intelligence purposes.

The second part of our support base is research and development to create new means for maintaining our qualitative military superiority. Since 1940, the technological revolution of our times has had a continuous and dynamic impact on our military structure, and this must be continued.

First, it is imperative that basic scientific research in the U. S. secure more support. Through pure research, which often appears aimless to the practical man of action, we create new scientific knowledge for subsequent exploitation by military scientists. Such activity, expanded through the National Science Foundation and normal university channels, will provide workshops for scientists who now complain so justifiably of the restrictions imposed on their creative abilities by military securities.

The problems of making the benefits of pure research quickly available to active military forces has resulted in formation of an applied technology team of military officers and scientists. While improved teamwork and methods can probably increase their output slightly, a sizable increase can only come from more military research and development. It has been stated that about half our national research and development efforts go into military technology, leaving half for basic research and for bettering the material welfare of the American people. While it is perhaps not desirable to increase the military share of the research effort, nonetheless a much greater quantity is unquestionably necessary to succeed in the many programs now on the military agenda: piercing the sonic barrier with production aircraft, beating the Soviets to the IBM and earth satellite, trying to find a defense against rockets, vertical-take-off and hydrofoil aircraft for dispersed operations, night and bad weather reconnaissance eyes, sophisticated fuels and a thousand others.

A continually increasing military research budget is necessary to create the demand for more national research capacity. The demand thus created, particularly if supplemented by similar pressures from industry, will eventually be satisfied by the training of more scientists and engineers.

The third part of the support base is efficient production. This base must be constructed not with a view to expanding production after D-Day, but for the purpose of quickly placing the benefits of technological improvements in the hands of combat-ready forces, at lowest cost. It cannot be said too often that production after D-Day can have no appreciable effect on the outcome of modern war and that a mobilization base is of no value.

For civilian defense we can shut down our cities on D-Day for the few weeks of the decisive phase. We can leave a small maintenance force easily sheltered, and evacuate populations to the country. Not only would this measure be more satisfactory than evacuation before each raid and cheaper than huge underground shelters, but absence of populations and production activity might remove an incentive for a Soviet attack.

The entire concept of our military production base must be modified if we are ever to enjoy acceptable security at tolerable cost in the nuclear age.

IX. New Military Organization

THERE ARE TWO REASONS why we do not have the best military establishment our money can buy: strategy and structure.

Strategy has already been discussed. As long as we are confused by two inadequate strategies, there is room for disagreement between Army, Navy and Air Force leaders about which units should receive priority in the military line-up. A single clear strategy will provide a rational basis for cutting out the many unnecessary military forces that are now maintained but which constitute neither an effective deterrent to war nor an effective means of deciding one in our favor. When our national purpose is clear, and when we have a counter-force strategy consistent with it, our military means can be shaped to serve them. There will be sound criteria for evaluating the relative effectiveness of this or that military proposal, and budgets for useless units cannot long continue hidden in the confusion over strategy.

The second reason why we do not have the best possible defense is the structure of our military establishment. It has been soundly criticized by former Air Secretary Finletter because its present organization can never produce the right types of forces to provide adequate security at reasonable cost. To overcome deeply vested military interests of the Army, Navy and Air Force, the operating commands must be regrouped and the Department of Defense reorganized both by appropriate legislation and executive order.

Our military commands must reflect military mission and not existing means. The commands, managed directly by the Secretary of Defense through an operations office constituted of the reorganized Joint Chiefs of Staff, should be set up according to primary missions regardless whether the units in each command are trained and equipped by the Air Force, the Navy or the Army. The three services should serve to build military power from the nation's support base but, once combat-ready, their units should be placed under operational control of a commander owing loyalty only to the Secretary of Defense and assigned a mission which is a specific part of our strategy. To bring this change about, an executive regrouping into five types of military command is necessary.

First, there should be a Nuclear Air Command, composed of superior nuclear offensive aircraft. This command should

be relatively invulnerable to surprise attack and used to destroy Soviet nuclear air power at the fastest possible rate after H-Hour of a U. S.-Soviet War. Although its nucleus at first would be the present Strategic Air Command, it would also include many elements from present Tactical Air, Naval Air, and Submarine Forces.

Next there would be Combat Commands–NATO, whose command structure is now properly organized, and another command whose units are suitably deployed for flexible use around the Communist Asian periphery. In accordance with provisions in mutual security agreements, these nuclear-equipped Commands would have the mission of destroying aggressor surface forces in the communications and battle zones, and aggressor air forces, if necessary. Besides modern Army surface units, nuclear rockets, and close-support bombing aircraft from present Tactical Air Commands, these two new Commands would have air reconnaissance forces able to overfly the battle zone and rear areas to watch air fields and approach of Communist ground forces in the daytime, at night, and in bad weather. These mobile units of surface and air power would be air supplied and able to operate in dispersed, cellular fashion to be relatively independent of the conventional, "chain of supply," surface logistics system.

To make Soviet air attack against the continental U. S. as costly and difficult as practicable requires Continental Defense Commands. The recently organized Continental Air Defense Command of Air Force, Army, and Navy units is a start toward overhaul of command structure required throughout the military establishment. Pacific and Atlantic Naval Commands are needed to protect the U. S. against naval and undersea attack, particularly with missiles launched from submarines.

A Special Mission Command of elite, conventional units is also needed. A logical nucleus should be our present Marines and Army Airborne, with their own air and amphibious transport. In cold war, these forces would participate in stopping small-scale local aggression in situations where nuclear power is not necessary. They would undertake a variety of special operations such as commando work, combat reconnaissance, and local police action. During the exploitation phase of major war, the Special Mission Command would occupy key aggressor administrative centers. It should then be augmented by reservists trained in mopping up operations and military government duties; this is the logical role for reserve personnel in modern war. Universal military training should prove unnecessary, as voluntary military reserve programs can provide sufficient troops for this mission. Active and reserve forces should be manned in a democracy by volunteers attracted by career incentives, not by impressed and unwilling recruits.

Between our supply points in the U. S. and our dispersed military forces operating overseas, we should operate Military Logistics Commands composed in major part of air transport, with a supplementary surface supply system. The air units would provide the speed and mobility so necessary to modern war. A faster supply line permits earlier introduction of new military models. The cost of air transport would be partially offset by reductions in pipeline stocks. There could also be major savings in Army, Navy, and Air defense units now assigned to protect the vulnerable land and sea supply system, which moves matériel too slowly to have much effect during the decisive phase. The decisive phase must be fought from stocks in dispersed dumps. The vulnerable surface supply system is supplementary and of value only before D-Day and during the exploitation phase; in neither period is elaborate and expensive logistics defense necessary.

To give effect and direction to this structure, the Office of the Secretary of Defense, the Joint Chiefs of Staff and the Weapons Systems Evaluation Group must be substantially overhauled to rid them of present voting committees of representatives owing allegiance to existing military organizations. The military leaders in these offices and the top officers in the operational commands must divest themselves of loyalty and second responsibility to the service from which they came.

Once the National Security Council sets clear defense policies, the best means to carry them out can be determined objectively from results of maneuvers, the new war gaming techniques, and the military judgment of a reorganized Joint Chiefs of Staff. Techniques are now available to help judge the military value of various units in relation to their economic cost. But we will never shape our military means efficiently to fit our national purpose until the organization of the staff of the Secretary of Defense and the operating commands reflect military mission and not existing military means.

In the current debate there are two approaches to the problem of adequate defense vs. tolerable cost. One is to fix the level of military expenditures by deciding what the economy and preservation of free institutions can bear, hoping for the best no matter what the relative strengh of Communist military power. The other is to pay the price asked by the present military organization for what it says is necessary for defense.

American taxpayers, who will buy six million new cars this year, are undoubtedly ready to pay the price of peace and freedom by giving up whatever part of their phenomenal material standard is truly necessary. In the last war, the price was readily paid because the American people were convinced the purpose was right and the means were necessary. But today, with every morning newspaper carrying a fresh dispute among military and Congressional leaders about which strategy and which forces are required, how can the people develop any confidence that the price asked is necessary?

Once our people are satisfied that our military objectives are sound, and once they know that our system of military management has been revised so that it can weed out unnecessary components and budget only for what is necessary, then there will be no question about footing the bill. To achieve acceptable security at reasonable cost, we must first have the right strategy and the right structure.

Fifth: THE ANNOUNCEMENT OF POLICY

TO AVAIL OURSELVES of the political opportunities inherent in a military policy of Nuclear Punishment, a Presidential statement of the kind suggested needs to be made after we have the required intelligence capabilities. Military objections to announcement are conceivable if one's point of view stems from a secrecy complex and nuclear ignorance, the reflections of an uninformed nation fearfully trying to exist conventionally when we no longer hold the conventional balance of power. But if we approach world problems with the calm confidence to which our real strength entitled us, with a determination to enforce peace justly in collaboration with allies, with the intent to seek our political objectives through peaceful means, there is every reason for publicizing the Punishment policy aspects of our intentions.

The masterful job that can be done by applying modern technology is adequate to solve most of our intelligence problems in ways far more effective than techniques in use today.

The announcement of Punishment policy would constitute the first realistic restraint on massive use of nuclear bombs. It is a measure without any prejudice to our military position.

It cannot be blocked by Soviet obstructionism, because we can take the step without agreement with the Soviets. Its usefulness does not depend on any confidence in Soviet intentions.

Also, it will be our first official renunciation of total warfare until unconditional surrender since our unfortunate commitment to that concept after the Casablanca Conference. The announcement will bring the sort of limitation on warfare which we want, but not limitations we do not want. One limitation we want is the avoidance of an exchange of counter-city blows with weapons of mass effect. There are two we don't want.

The first to be avoided is any prohibition on the use of atomic weapons unless concurrent with progressive disarmament of all weapons. As noted, the peace is enforceable today because U. S. nuclear superiority outweighs Soviet preponderance in conventional military strength. United States consent to nuclear disarmament without simultaneous disarming of Soviet and Chinese conventional forces would be in effect unilateral disarmament and a suicidal step for the whole Free World. The Free World can raise armies from a population approximating 300 million. The Communists can draw on 700 million. Western Europe holds the balance of steel production. Now our annual tonnage advantage over the Communists is on the order of two to one. With Europe in Communist hands, the ratio would be almost reversed. Yet there exists today a large body of well-intentioned opinion favoring purely atomic disarmament. If we were to renounce the use of nuclear weapons against cities unless ours were first attacked, there would be far less pressure for nuclear disarmament alone.

The second restraint on nuclear warfare which we do not want, but which is politically imposed on us today, is the inability to use nuclear weapons in peripheral warfare. Domestically, this restraint is partially the result of a lack of public understanding of the real nature of nuclear war. We fear what we do not understand. Our officials may believe that we also lack the fortitude to face the issue squarely.

As previously elaborated, military thrusts by overwhelming Communist manpower around the periphery of Europe and particularly Asia cannot be contained by conventional forces of the Free World. But our nuclear plenty and the cheapness of nuclear-equipped forces make it possible to destroy Communist troops in the battle and communications zones at the specific request of Allied nations and in partnership with limited European or Asian ground troops.

Nuclear weapons would have quickly ended aggression in Korea and Indo-China. They could insure the defense of Formosa. Again having in mind General Twining's dictum that "the best way to prevent war is to be able to win," the emphatic threat to use them should be sufficient to deter Soviet, satellite, or Chinese military adventures in Europe or Asia.

As long as atomic warfare continues to conjure in the public mind only images of more Hiroshimas, the Free World is effectively prevented from punishing massed Communist manpower with nuclear weapons. But once we renounce the use of nuclear weapons against cities and adopt a policy of Nuclear Punishment suited to aggressive crime, we shall have taken the key step necessary to lift political restraints on the only effective counterbalance to Communist manpower we possess. After an announcement of restraint in counter-city warfare, we can begin to bring our nuclear plenty to bear in stabilizing the military situation around the globe.

The announcement would not constitute proclamation of a modern Monroe Doctrine. The new policy resembles the Doctrine in that military protection is extended to undefended areas, not the Western Hemisphere in this case but the entire Free World. But there the similarity ends. Under the proposed policy our protection would not be extended unilaterally, but in full partnership with allies.

The universal yearning for peace and the fear of war are so strong that announcement of our change from Massive Retaliation to Punishment policy should have broad appeal throughout the world. On both sides of the Iron Curtain, the spirit of resistance to the Soviets will be heightened by the promise of removing population, cultural and production centers from the stage of any World War III which resistance activities might risk. Captive peoples cannot help but notice our distinction between them and the Kremlin's military instruments. Europeans will be encouraged to positive action by the shielding effect of our nuclear power. They can be freed from their presently paralyzing apprehensions of Soviet atomic attacks on European cities in the event of World War III. The Soviets will thus be denied opportunities for political blackmail now being used with telling effect against European countries who now fear that atomic annihilation awaits them unless they avoid doing anything that might in any way risk World War III—in other words, unless they remain divided, neutral and weak.

Such a demonstration of self-restraint with determination on our part would quiet damaging talk in Europe about our atomic sabre rattling. It would deter movements in Europe and Asia which now believe that nuclear destruction can be avoided only through neutralism. Once convinced that our great strength has been harnessed to serve a morally sound policy, the uncommitted nations may well choose to support more actively the cause of the Free World.

Sixth: THE PURSUIT OF PEACE

X. The Drive for Disarmament

WHILE WE HAVE nuclear plenty and the Soviets have nuclear sufficiency, a policy of Nuclear Punishment can provide adequate security. But what of the next period? How do we enforce the peace when there is a stand-off in counter-city **and** counter-force strength.

A probable consequence of the present nuclear arms race is that the Soviets will achieve equality in nuclear power. Our present superiority would then no longer tip the balance in our favor. To make the argument clear, let us postulate a not unrealistic situation some years hence. Suppose that the Soviets can dispatch simultaneously several thousand nuclear weapons against our nuclear air installations and cities. Suppose one third explode on target.

In the age of Soviet sufficiency and U. S. plenty it has been suggested that a nuclear detonation on their part would be considered the act of war which would trigger our destruction of his nuclear capability. But this is an inadequate definition of this act of war when we are faced with a thousand bombs simultaneously on target. Suppose we then define an act of war as the instant when they move bombs with nuclear charges aboard aircraft or missiles. Suppose further that we ourselves can detect this instant, or even that the U. N. has ground detection devices at U. S. and Soviet air bases to determine if they are brought together in violation of an international agreement to keep them apart except for preannounced test purposes. T! e loaded bombs might be brought to the delivery vehicles, assembled and probably dispatched before we could get the signal, bring ours together, and fire. Even if we could "draw" as fast as the Soviets, their bombs would be airborne before we could hit their bases. We could

not rely on warning in time to blunt the attack in the USSR. The temptation for us to resort to preventive war before the Soviets achieve equality in nuclear power might be irresistible.

No matter how sophisticated the argument or what the estimate of time when the Soviets will have an equality of nuclear power, the situation remains the same. This generation must achieve world disarmament. A policy of Nuclear Punishment is the necessary prelude to disarmament, but it is no substitute. It merely buys time in which the world can organize disarmament. The better our counter-force capability, the more time we buy.

As a start toward a fresh approach to the disarmament issue, public attention can be drawn to the fact that Nuclear Punishment is in itself a policy of disarmament. It directs our offensive military power to disarm the aggressor in event of armed conflict, and thus it is a step fully consistent with our national purpose. As General Twining has said, "We can now aim directly to disarm an enemy rather than to destroy him as was so often necessary in warfare of the past." But military policy consistent with our disarmament objective is not enough. What of our political moves?

It is well established that a system of free inspection is a necessary pre-condition to disarmament. The Baruch plan for inspection of atomic plants ran aground in 1947 on Soviet dependence upon its Iron Curtain, which turned out to be an untouchable foundation of Kremlin power. Since then, proposals for inspection have been sterile. Possibilities exist, however, in a new concept.

Nuclear bombs in a stockpile can hurt no one. They must be delivered, and the delivery system constitutes the other half of the threat to peace. The means of delivery which can do real harm in the foreseeable future can be observed from the air.

During the last war, the air reconnaissance group I commanded kept count of numbers and types of aircraft on active German bases in a wide area through daily or bi-weekly photographic missions flown four to seven miles up. This is to say nothing of the daily reporting service on anti-aircraft and artillery positions which we provided to the entire First Army, and our reporting on moving targets in the communications zone and sometimes on the sea, which we kept under observation from dawn to dusk. Although unarmed, our losses were lowest among air groups in Europe. When the weather was bad, we sometimes flew under it, but this reduced our coverage. Since that time, various electronic eyes supplement visual and photographic observation, and night and bad-weather reconnaissance is becoming remarkably perceptive.

The factors in this sort of operation remain basically the same today even though the details have altered. Through an aerial surveillance agency of the veto-less Assembly, the United Nations could operate just such a system today over the air installations of nuclear powers. Observations affecting the peace could be publicized.

A precedent for organizing such an agency to serve the U. N. has just been established. On January 13, the Organization of American States requested the United States, a member country, to furnish reconnaissance aircraft for observation of fighting in progress in Costa Rica.

The Assembly might first try to obtain a convention signed by all members which would extend in a new dimension the three or twelve mile sovereignty limitation on national waters. The lower the sovereignty limit, of course, the better. But even twelve miles would present no problem, as British production model aircraft have already been reported flying this high. Regardless of the sovereignty limit, it would be desirable to seek a provision in the convention where the U. N. agency could dispatch an aircraft below 1000 feet, on particular occasions.

How would the U. S. and USSR react to such proposals? We certainly should not object. The Soviets already know much about nuclear air targets in the U. S., through their agents in this country and through our magazines and newspapers. We know far less about targets in the USSR. We would have everything to gain from the operation of such a system.

As for the Soviets, they might or might not sign the convention. If not, and the U. N. majority so voted, the agency could still operate the aerial inspection system over the USSR with negligible losses. Techniques now available enable building vehicles to penetrate air defense systems with a very low probability of detection and interception. When threats to the peace are critical, such losses, if they occur, would be more than justified.

The United Nations might also consider developing surveillance satellites in a high priority program. When they are operating successfully, electronic receivers could be located in the surveillance center of the U. N. Assembly. These satellites, which would circle the world every few hours, would regularly scan all significant areas of the earth.

This course of U. N. action might not be objectionable to the Soviets, because aerial inspection would not disrupt the Iron Curtain controls so vital to a police state. But even if they do not sign the convention, the U. N. Assembly can proceed by majority vote so that inspection need no longer be frustrated by the Soviets.

Although the U. N. General Assembly might thus be able to assume some responsibility for reporting aircraft and missile counts and for warning the world of an impending nuclear air attack, we must also press for ground inspection of major weapons as another phase of U. N. surveillance. Aerial inspection might not be fool-proof enough to enable our agreement to progressive reduction of all major military forces. But it does establish the principle of inspection, and would prepare the way for a fully adequate inspection system. Only then can we proceed with progressive disarmament of all weapons not required for internal police purposes.

It is doubtful if the threat of mass attack by covert delivery is serious. Soviet agents can hardly undertake the delivery of a large number of bombs on target simultaneously. As long as our FBI and local police are alert to this danger, the chance of catching agents and disrupting the operation is good and this makes large scale covert delivery impractical.

The ultimate step in our disarmament drive must be enforcement of disarmament laws on individuals. Realization must first grow in the Free World that sovereignty rests in the individual. Under Free World concepts, it is the free and sovereign individual, and not the state, who delegates power to various levels of government. The only power which the majority of the world's free individuals want to delegate to international authority today is the power to enforce international peace. The world's peoples want to regulate other human activity in their own way through national governments, but the enforcement of peace is an acknowledged matter for world authority. Once armaments are reduced to a certain level, either as the result of international convention or World War III, disarmament can perhaps be enforced by international laws, courts and inspectors with police powers—all concerned with rearmament crimes by individuals. The free individual as the responsible sovereign must incur the punishment for transgression of disarmament laws.

This objective is perhaps unattainable as long as Communist philosophy holds that only the state, and not the individual, is sovereign. But there are many advantages to making detailed plans. We could state that disarmament law enforceable on individuals is one of our basic foreign policy objectives. In psychological warfare its formulation would help rally many uncommitted, neutral, and even captive peoples to the Free World cause.

Acceptance of international disarmament laws enforceable on individuals should also be one of the principal conditions imposed on a defeated enemy. In case of sudden hot war, the decisive phase will be too short to permit formulation of this objective as a war aim then. Articulation of war aims is necessary now if we are to shorten future war by the carrot-and-stick approach.

World disarmament is a key foreign policy objective. After a certain period during which Punishment policy can provide acceptable security, world disarmament becomes a pre-condition to the elimination of fear and growth of freedom. The psychological climate resulting from a future stand-off in nuclear power will some day begin seriously to erode the Western spirit. Punishment policy with the power of technology behind it provides time to organize world disarmament, but cannot serve indefinitely.

XI. The Political Offensive

POLITICAL, diplomatic and propaganda efforts could turn opportunities inherent in a policy of Nuclear Punishment into a peace effort that could be victorious over the Communist drive toward world domination. Here are the opportunities summarized.

An announcement of Punishment policy emphasizing restraints on the use of nuclear power, renunciation of total war, and the nuclear protection available to our military partners, could become the second step in President Eisenhower's "Atoms for Peace" program. We would be placing U. S. nuclear power at the service of the world to enforce the public peace until the world is ready to put adequate inspection and enforcement powers directly into the hands of the U. N. We would be offering a **just** enforcement service, with the punishments defined beforehand, in partnership with other nations of like mind.

At the same time, we might emphasize that we intend to substitute world development projects for some of the armament programs eliminated by dropping conventional military strategy. The billion dollars budgeted this year to stockpile strategic raw materials for an outmoded mobilization base could finance several major aid programs. We might also allude to a third step in the "Atoms for Peace" program, the gift of a greater portion of our nuclear materials as sources of power in underdeveloped areas, once a world system of enforceable disarmament has been attained.

Through the mechanism of a national referendum, America might approve a proclamation of faith and purpose "in the pursuit of peace," drafted originally by a broad group of public opinion leaders. Coming from the American people as a body, such a proclamation could do much to reassert our moral purpose, bring public understanding of the issues, and overcome some of the damage caused by our postwar spate of errors in understanding the psychology of the world's peoples.

It might begin with a restatement of our spiritual values, our conviction of the equality of all men, and our rejection of domination by force as the means to any real solution of human problems. It might pledge our military strength to the service of world peace, to be used justly under conditions defined by the U. N. General Assembly for disarmament of military forces violating the peace of the world. It might avow our determination to press for disarmament under inspection, and subsequent international armament laws enforceable equally and individually on all men. It might include a pledge to use some of the energy released as national armaments are reduced to improve the lot of our underprivileged fellow men, to provide resources for them to do things for themselves in their way, without economic exploitation by us.

In the United Nations, we might press for a series of conventions "in the pursuit of peace":

A. An agreement signed by each nation to withhold nuclear bombings of population centers, unless weapons of mass effect are used against theirs. A stipulation should be included that nuclear stockpiles and delivery means be located at stipulated distances from cities. Nations which do not comply would not be accorded the protection for civil populations which this convention offers.

B. A convention recognizing the right of a nation and its allies to use nuclear weapons directly against forces of any foreign power violating its territorial rights.

C. Charter revision to provide for U. N. police occupation until elections in event of specifically defined acts of seizure of political power by force.

D. A convention recognizing a vertical dimension of the three mile limit principle, permitting global air inspection by means of reconnaissance under control of an armaments surveillance agency of the General Assembly.

E. A convention permitting supplementary ground inspection of any military installation when in the view of the surveillance agency the world requires additional information in the interests of peace.

F. Continued proposals for progressive reduction in armaments, once inspection conventions are agreed upon.

G. Proposals for international disarmament laws enforceable on individuals, to be submitted for ratification once present arms levels begin to be reduced to police proportions.

H. A convention whereby, once world disarmament is underway, each nation would give a percentage of its present defense budget to a world development fund administered by the U. N.

I. Charter revisions to amend the U. N. composition and structure so that these activities could be carried on under a politically sound and just organization.

There is great hope that, impelled by faith and moral purpose, we can harness the powers of fission and fusion to eliminate use of force while the world develops a system and structure for settling world issues through law and order. But defense policy must first be revised.

XII. The Moral Basis

THE ULTIMATE TEST of military policy is its moral foundation. How do the proposals set forth in this article stand up in the light of American ideals of justice and fair play? Are they based on moral principles sound enough to rally allies as partners in the pursuit of peace and freedom?

There are no experts at moral judgment, and moralizing is often regarded as unbecoming in a military presentation. Readers must themselves judge this article in the context of their own concepts of America's principles. But I should like to state briefly my own convictions.

The central problem of the nuclear age is how to prevent violent conflict in our long-term struggle to stop Communist imperialism and demonstrate the superiority of Western ideals over Communist ideology. To succeed, we must first have an effective system to discourage resort to violence by any nation seeking political gain.

It is now in our power to enforce world peace if, in military cooperation with our allies, we use Nuclear Punishment justly to prevent aggressive crime. I believe it is morally correct to use force to negate force.

When we achieve justly enforced competitive peace, we can reveal the fallacies of Communism in a non-violent climate and nourish the growth of liberty under law.

Special Report

(This article represents the result of an extensive research on a problem of outstanding importance.)

$60-BILLION BUDGET: EISENHOWER'S NEW GOAL

As an economy goal, the President now is aiming at a budget of 60 billion dollars a year, a figure huge except in wartime.

That means most cutting is over. Officials say many costs are near rock bottom. Some are rising. New programs are starting.

President Eisenhower, after many cuts in Government spending, finds his efforts to save money bumping up against the same old troubles President Truman had.

Defense is the Treasury's biggest cost and now is about as low as Mr. Eisenhower feels is safe.

Other big costs, such as interest on the federal debt, farm price supports, veterans' benefits and the postal deficit, are largely beyond his power to control. Thrift in these depends on economic trends or on congressional politics.

The area left for trimming is now seen by officials as a small part of the total. Here the President runs into strong pressures to be liberal—and is giving in to some of them.

The Administration, after cutting old programs, feels compelled to start some new and costly ones.

The result is that the Treasury's books, which Republicans promised to balance, still are 2.4 billion dollars in the red in official forecasts. Mr. Eisenhower says he hopes to cut spending by that much more over the next couple of years. Government cost then would hold at 60 billions a year, almost a fifth lower than in the final Truman year but far higher than many Republicans expected.

A close look at what is going on in Government spending shows even that 60-billion economy goal is hard to reach.

Defense program levels off. The "national security" or defense part of the budget includes not only the U. S. armed forces, but also stockpiling, atomic energy and military aid for allies; it accounts for 65 per cent of the total. Here the cuts, as the chart on this page shows, have been deep already. Getting costs still lower is a great problem.

Since Mr. Truman left office, President Eisenhower has cut spending in the Department of Defense, for the Army, Navy and Air Force, by 9.2 billions. Less money is going for payrolls, for ships, for Army equipment such as tanks, trucks, artillery and ammunition, a trifle more for planes.

HOW BILLIONS ARE BEING SAVED

	Actual spending for year that ended in mid-1953	Spending planned for year that ends in mid-1956	
U.S. ARMED FORCES	$ 43,610,000,000	$ 34,000,000,000	— $ 9,610,000,000
STOCKPILING	$ 919,000,000	$ 783,000,000	— $ 136,000,000
AGRICULTURE	$ 2,936,000,000	$ 2,259,000,000	— $ 677,000,000
POWER, MINING, OTHER RESOURCES	$ 1,358,000,000	$ 953,000,000	— $ 405,000,000
MAIL, AIRLINES, SHIPPING, ETC.	$ 2,076,000,000	$ 1,619,000,000	— $ 457,000,000
HOUSING, SLUM CLEARANCE	$ 550,000,000	$ 83,000,000	— $ 467,000,000
INTEREST	$ 6,583,000,000	$ 6,378,000,000	— $ 205,000,000
OTHER	$ 16,242,000,000	$ 16,333,000,000	+ $ 91,000,000
TOTAL	$ 74,274,000,000	$ 62,408,000,000	— $ 11,866,000,000

Source: The budget of the United States Government

COMMUNISTS IN GOVERNMENT— THE ISSUE COMES UP AGAIN

The furor over charges of Communists in the State Department is being renewed.

Were any proved Communists actually turned up during the long investigations? Have any been fired out of the Department?

Senator Olin D. Johnston (Dem.), of South Carolina, says one thing. Senator Joseph R. McCarthy (Rep.), of Wisconsin, says another. Both cite a State Department letter on 80 individuals named by Senator McCarthy after his original charges in 1950.

On these pages you get the full text of Senator Johnston's statement, the full text of the State Department's release of a letter to him, and excerpts from the debate that followed in the U. S. Senate.

JOHNSTON: "NOT ONE PROVED A COMMUNIST"

Following is the full text of a statement made Jan. 17, 1955, by Senator Olin D. Johnston (Dem.), of South Carolina:

As chairman of the Committee on Post Office and Civil Service of the United States Senate, I desire to clear up for the benefit of Congress and the public the facts concerning governmental employes as to whether any of them have been found to be Communists or disloyal to our Government under prior or the present so-called Government security programs.

In order to proceed in an orderly manner I thought it desirable to start at the very beginning. The charges of extensive Communism and disloyalty of employes in Government were first made by the junior Senator from Wisconsin [Senator McCarthy] in February, 1950. At that time the Wisconsin Senator is reported to have said: "I hold in my hand the names of 205 members of the Communist Party now employed in the State Department"; and later he said: "I hold in my hand the names of 57 card-carrying Communists now employed in the State Department."

As a result of these charges, the United States Senate directed that an investigation be made. In accordance, a committee was appointed which came to be known as the Tydings Committee. After extensive hearings, in which 3 million words of testimony were taken, the Tydings Committee brought in a report stating, in effect, that the charges made by the junior Senator from Wisconsin had been found to be untrue.

Immediately upon the filing of this report by the Tydings Committee, that Committee was charged with "whitewashing" State Department employes who had been accused by the Wisconsin Senator of being Communists. This situation created confusion in the public mind as to what the real facts were. So in starting my work to clear up the matter of Communism concerning Government employes, I secured from the Committee files the names of the employes of the State Department against whom the Wisconsin Senator had made charges—there being some 80 in number—as well as the names of 10 other individuals whom he had publicly charged. I sent these names to the State Department in December, 1954, and asked the Department to inform me, first, if any of these employes had been found to be Communists or disloyal to our Government.

By letter, the State Department has now informed me that not one of these persons who were investigated by the Tydings Committee in 1950 has been proved to be or found to be a Communist or disloyal to our Government. In that letter to me the State Department stated that three of the persons the Wisconsin Senator had originally charged had resigned or been dropped from the State Department rolls, but that none of these three were found to be Communists or disloyal to our Government. It is, therefore, plain that from the present Republican Administration we have now received word that not one of the State Department employes charged in 1950 and investigated by the Tydings Committee has been found to be a Communist or disloyal to the United States. Coming as this does from the present Administration in Washington, this should clear up any question in the public mind.

The State Department in its letter to me further verifies the findings of the Tydings Committee by stating that, of the 80-odd names given to the Tydings Committee by the Wisconsin Senator as persons then employed, only 40 were in fact employed in the State Department in 1950; 33 had resigned or left the State Department prior to that year, and 7 of the names given to the Tydings Committee by the Wisconsin Senator as employes of the State Department had never been employed by the State Department. The State Department further reports that 12 of the 40 who were working in the State Department in 1950 are still employed in the State Department in 1955 and that 10 others who were working for the State Department in 1950 have been transferred to other United States governmental agencies.

Realizing that the 1950 investigation by the Tydings Committee of the accused State Department employes and the publicity following that investigation has left a great deal of doubt and confusion in the public mind as to the true facts in the case, the letter to me from the State Department, stating that none of the employes have been found to be Communists or disloyal to our Government, should clear up this matter for all time.

It is gratifying to have confirmed that the charges of widespread Communism in the State Department, put